

FAMILY VIEWS: THE EFFECT OF TRAINING PARENTS
TO MEDIATE THEIR CHILDREN'S TELEVISION VIEWING
ON CHILDREN'S COMPREHENSION OF COMMERCIALS

By

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The effect of encouraging and training low-income parent/caretakers to mediate their preschool (age 5) child's television viewing on children's comprehension of television commercials was investigated. Children ($n = 72$) from eight Head Start classrooms were pretested for three levels of comprehension of television advertising: ability to discriminate between programs and commercials, understanding of the intent of commercial messages, and understanding the deceptive potential of commercials.

Subsequent to child pretesting, self-selected parent/caretaker and parent dyads ($n = 45$) attended a workshop about television viewing and were randomly assigned to a control or experimental workshop. Parents in the experimental treatment were encouraged and trained in mediating their child's understanding of commercials. Parents in the control treatment

received information about children's viewing and discussed television violence. Two to three weeks subsequent to their parents' participating in one of these workshops, children were posttested.

Children of parents who participated in the experimental workshop demonstrated significantly greater time 1 to time 2 increases for two open-ended items that measured children's understanding of the intent of commercials than children of control workshop parents. Posttest responses indicated that children of experimental workshop parents accurately articulated intent of commercials to induce buying the product significantly more often than children of control workshop parents. No significant main effects or interaction effects for time by treatment were found for any of the other dependent measures.

Children's pretest ability varied widely among the three levels of commercial comprehension. Ability to discriminate commercials from programming was relatively high and increased only slightly on the posttest. Pretest levels of understanding commercials' deceptive potential was low and remained low on the posttest. However, pretest measures of understanding the intent of commercials were mixed, with high scores for recognition items and low scores on free-response items. Significant posttest increases for the experimental group in articulating intent of commercials suggest that parents can be motivated to successfully apprentice their children in understanding television content and that they will be most effective when tapping comprehension within the child's zone of proximal development.

CHAPTER 1 INTRODUCTION

The intermixing of mass and interpersonal communication that occurs when families watch television demands that we transcend the narrow theoretical limits of our subdisciplines. This arena offers opportunities to formulate a more fundamental conception of communication as the basic social process defining, shaping, and coordinating human interaction. (Alexander, 1990, p.223)

Communication between children and parents about television's symbols acts as a powerful influence intervening between television content and its effect on children (Alexander, 1990; Desmond, Singer & Singer, 1990; McLeod, Fitzpatrick, Glynn, & Fallis, 1982; Reid, 1979).

Parents/caretakers have the optimal opportunity to mediate the meanings their children construct from television content because they are the adults most likely to be present before, during, and after children view television (Bryce & Leichter, 1983; Corder-Bolz, 1980; Timmer, Eccles, & O'Brien, 1985).

Parental Mediation

In this study parent/caretaker¹-child mediation implies two types of parent/caretaker-child interaction. One type involves the extent to which parents and other household members spontaneously answer children's

¹The use of the term parent throughout this report is inclusive of any adult or even an older sibling who is in the role of caretaking a young child.

questions about the world around them and offer evaluations and explanations of people, events, objects, ideas, and messages like televised content. Family mediation also refers to how parents/caretakers create and enforce standards of behavior and how children are disciplined.

Parental limitation and restriction of viewing selections implicitly communicates values to children, while parents' comments about television content explicitly shape children's perceptions of reality (Lull, 1980). These comments can serve to influence values and views of the world and society embodied in television programming and commercials (Buerkel-Rothfuss, Greenberg, Atkin, & Neuendorf, 1982; Lull, 1980; Reid, 1979). Parents, by modeling interpretation of the meanings of televised messages and by talking to their children about how they interpret television, may help their children to develop their own capacity for interpreting television fare (Corder-Bolz, 1980).

Family rules about what and how much viewing is allowed and a discussion-oriented family communication style are positively associated with children's lower total viewing (Desmond et al., 1990), awareness of prosocial messages (Abelman, 1986; Buerkel-Rothfuss et al., 1982), understanding of television's conventions, recall of narratives, and ability to distinguish between reality and fantasy (Desmond, Singer, Singer, Calam, & Colimore, 1985; Singer, Singer, Desmond, Hirsch, & Nicol, 1988). Ward, Wackman, and Wartella (1977) held that "parent-child interaction can effectively augment the development of a 'cognitive filter' that even very young children can use in comprehending and evaluating advertising" (p.183).

Parents who reported being concerned that their children's behaviors are affected by television viewing are more likely to report limiting their children's television viewing (Bybee, Robinson, & Turow, 1982). Parents who reported being concerned about their children's understanding of content were more likely to report engaging in discussions of content with their children (Abelman, 1990). Parents who reported using the existing parental discretion warnings were the same parents who most often reported mediating their children's viewing (Slater & Thompson, 1984).

Parental mediation of young children's television viewing in the home was observed infrequently among the heaviest viewers in a longitudinal study reported by Desmond et al. (1990). The higher parents' educational level and the higher their socioeconomic status (SES), the greater the likelihood of parents reporting that they mediate their child's viewing (Comstock, Chaffee, Katzman, McCombs, & Roberts, 1978; Medrich, Roizen, Rubin & Buckley, 1982). The more parents said they believed in television's negative effects, the more parents reported engaging in mediating activities (Medrich et al., 1982). However, African-American parents at all SES levels were less likely to report that they restrict their children's viewing than non-African-American parents (Medrich et al., 1982).

The majority of parents surveyed about their interest in their children's viewing have indicated that they would welcome educational information to help them in regulating their children's television viewing (Katz, 1983, Matthews, 1991; MacWright, 1985). While parents report great concern about their children's television viewing, they also report low regulation of

that viewing (Bower, 1973; Mohr, 1979). In their detailed volume about children and television, Comstock and Paik (1991) commented

The proportions (of parents) in the nationally representative data . . . who assert they 'often' undertake any of the regulative measures only infrequently approximate 50%. . . . Because of the widespread approval of parent involvement we would expect any inaccuracy in reporting to over-estimate the degree of regulation. (p. 51)

Although observed relationships between higher levels of parental television mediation and higher levels of children's comprehension of television strongly suggest a causal relationship, direct attempts to elevate parental mediation have yielded mixed results (Greenberg, Abelman, & Cohen, 1990; Heald, 1980; Matthews, 1993).

Children's Television Viewing as a Public Issue

Children view an estimated average of 40,000 television commercials a year (Condry, 1989; Condry, Bence, & Schiebe, 1988). Most advertising targets adults, but during children's programming, after school, and on Saturday mornings advertisers target children. Child advocates and free-market proponents have conflicted about the ethics of targeting television advertising to children for almost 25 years (Action for Children's Television v. FCC, 1977). Child experts argue that directing persuasive commercial messages at young children who are not ready to understand the persuasive intent of the message is not fair (Ward et al., 1977). Free-market proponents argue that the market will self-regulate as parents steer their children away from commercial-laden programming (Fowler & Brenner, 1982). Congressional recognition of the failure of the free-market to adequately provide children's programming and limit commercial minutes during

children's programming came with the 1990 passage of The Children's Television Act (CTA), which restricts the number of allowable commercial minutes per hour of children's programming on both broadcast and cable outlets (Palumbo, 1991). Also, in an effort to increase educational children's programming, CTA requires broadcast stations to air "some" educational/informational programming.

A new surge of public concern about the effects of media content on children has accompanied the introduction of each new communication medium from motion pictures to television (Wartella, & Reeves, 1985), and the 1980s cable boom echoed this pattern. The penetration of cable presents children with more advertising and more programming, including more violence and adult themes. Cable subscription increases the need for parental mediation, but according to Atkin, Heeter, and Baldwin (1989), "Despite this fact, cable subscribers show no more resolve to intervene in the viewing process than their . . . broadcast counterparts" (p. 578).

Research on Children and Television Advertising

Media researchers have responded to the public's concern about children and television advertising with hundreds of studies during the past two and half decades (Comstock & Paik, 1991). During the late 1970s the National Science Foundation convened a group of media researchers to provide data for the Federal Trade Commissions' consideration of the issue. In a comprehensive review and reports of their own investigations on the effects of advertising on children, Adler, Lesser, Meringoff, Robertson, Rossiter and Ward (1980) considered young children's (a) ability to distinguish

commercials from programming, (b) ability to discern the selling intent of commercials, (c) understanding the persuasive and/or deceptive potential of television commercials. They concluded that

A substantial proportion of children, particularly those below age 7 or 8, do not draw upon the concept of selling intent in defining commercials, in distinguishing them from programs, or in explaining their purpose, suggesting little comprehension and/or low salience of persuasive intent as a critical feature of advertising. (p. 214)

Comstock and Paik (1991) emphasize that although the data may suggest that by the time children are seven years old the majority can correctly identify commercials verses programming, if children cannot recognize commercials' persuasive intent, their ability to distinguish commercials as different from the program is irrelevant.

Successful mediation of children's viewing will be influenced by the child's developmental level and cognitive capacities. Levin et al. (1982) found that when the researchers used nonverbal measures, 3-, 4-, and 5-year old preschoolers could make a distinction between commercials and programming. The youngest children made correct identifications more than 50% of the time and 5-year-old children about 80% of the time. More than 90% of mothers of 3-year olds reported that their children asked for toys they saw advertised on television (Lyle & Hoffnan, 1972). Children's ability to distinguish between commercials and programming and to associate advertised products with buying requests develop well in advance of their ability to recognize that the entertaining commercial messages are shown for a purpose other than entertainment. The cognitive ability required to understand that one message may have more than one interpretation

normally does not develop until between ages 4 and 5 (Flavell, Flavell & Green, 1989). Understanding the deceptive potential of a commercial; i.e., that a commercial may portray a product more attractively on television than it is in real life in order to induce the audience to buy, requires even more complex cognitive abilities (e.g., the viewer must be capable of thinking about the advertiser's manipulation of the viewer). The capacity for this type of recursive thinking does not develop fully until later childhood (Miller et al., 1970).

The Child Market

Half of all 5-year-old children make purchases regularly with the help of parents (McNeal & Yeh, 1993). The attraction of marketers to these young people is based not only on the number of potential consumers but also on the belief by marketers that young audiences are more desirable because they have not yet formed brand loyalty (Stabiner, 1993). Not only are young children a more easily influenced market, but they are a burgeoning market. In 1989 the United States birth rate reached more than 4 million for the first time since the early 1960s (Shrieves, 1993). Marketing specialists saw this population increase as an opportunity to cultivate a new children's market (Goerne, 1992). A group of 48 million United States spenders younger than 12 command allowances and incomes that total \$15 billion dollars annually and have the potential of influencing \$147 billion dollars worth of purchases (McNeal & Yeh, 1993). Child consumer expert James McNeal estimates that children younger than 12 will control more than \$100 billion of consumer choices by the year 2000 (1993).

Given this lucrative potential, young child audiences are targeted aggressively by toy, candy, cereal, fast food, and other product manufacturers and service providers (Stabiner, 1993). Although young children's inability to discern the selling intent of commercials is well established (Ward et al., 1977), public policy does not regulate the marketplace. Parents' mediation--e.g., helping their children to understand the selling intent of commercials--emerges as a viable option for parents who want their young children to interpret commercial messages accurately. Researchers using observational and ethnographic methods have discovered that as audiences interact and interpret, they assign their own meanings to television content that may be quite discrepant from the meanings intended by sponsors and producers (Morely, 1993). Parents may become "cognitive filters" (Ward et al., 1977) by pointing out or asking their child to identify the advertised product, or explaining the selling purpose of the commercial message and that messages may be deceptive.

Intervention to Increase Parent Mediation of Children's Television Viewing

The few studies involving interventions designed to help parents in their television mediation efforts have yielded mixed results. These results suggest that simply giving parents information (Greenberg et al., 1990) is less effective than giving parents encouragement to regulate their child's viewing accompanied by explicit instructions and concrete examples (Heald, 1980). Although Heald's intervention lead to more parental restriction of antisocial programming, no attempt was made to help parents influence children's comprehension of television content. The purpose of the present

investigation is to determine whether children from low-income families-- whose parents are encouraged and informed about why and how to mediate their young children's television viewing--will increase in ability to distinguish commercials from programming, in their understanding of the intent of television advertising, and in their understanding of the deceptive potential of television advertising. The theoretical sources that guided the conceptualization of this investigation will be discussed in Chapter 2.

CHAPTER 2 THE LITERATURE

Historical Context: Family Variables in the Study of Media Effects and Children

More than six decades ago, the Motion Picture Research Council responded to parental concerns about the influence of violent and sexual motion picture content on their children by initiating what was to become the first large-scale research program to study media effects on children, the Payne Fund Studies. During the late 1920s and early 1930s, a group of leading United States educational psychologists, psychologists, and sociologists set out to elucidate the public debate over whether or not commercial motion pictures were responsible for contemporary youth crime and delinquency. The scholars conducted a series of 12 large-scale studies on the influence of motion pictures upon children and youth. The researchers used survey, experimental, and qualitative approaches to determine young people's use of the medium, their activities, school performance, and demographics, as well as the relationships between their movie viewing and their knowledge, attitudes, and behaviors.

The Payne Fund researchers defined and isolated variables and measured observable, quantifiable outcomes, like learning, school attendance, and performance. The survey and experimental work of the Payne Fund studies linked many factors like social class, family background,

and gender with the influence of motion pictures on behaviors. Several of these studies revealed that children with strong social ties like family and community support were less influenced by antisocial motion picture messages than children with weak social ties (Charters, 1933). Thus, at this early point in media effects research, researchers identified the importance of family influence as a factor intervening between the viewer and the message.

The diffusion of television into lives of American children began in the late 1940s, at the same time the study of mass communications as a distinct academic discipline developed. The rapid introduction of television into American homes catalyzed the public to ask if violent programming content could be influencing the rise of juvenile delinquency. Legislators called for studies into the influence of television on children (Rowland, 1983). As early as 1952, Congressional hearings addressed this concern. Although some backward glance was given to the Payne Fund studies' earlier conclusions, Senator Owen Harris, Chair of the Senate Committee on the Judiciary Subcommittee to Investigate Juvenile Delinquency, dismissed the Payne Fund studies' findings as inconclusive. Unfortunately, ignorance of this early work left researchers of the new medium to rediscover laboriously patterns of influence that had been established fairly well two decades earlier.

In 1955 Paul Lazarsfeld, one of the founders of communications research, called for the study of parental influence on children's television viewing. "We need studies which would result in ideas as to how the average family can create an atmosphere which will compete with television" (p. 250). As families purchased televisions, television viewing replaced traditional

ways families spent their leisure time (Himmelweit, Oppenheim, & Vince, 1958; Shramm, Lyle, & Parker, 1961). Shramm et al. (1961) conducted a multi-study program spanning many communities in both the United States and Canada. Schramm and his associates surveyed hundreds of families and found an active child audience with definite viewing patterns and preferences. This early recognition of the child as active in the process of television viewing stands apart from the emphasis on how the child is acted on, characteristic of the effects research that was to follow. Shramm et al. identified a group of intervening variables that they saw as mediating the child's viewing process: age, intelligence, sex, family, and peer relations. These variables are similar to those identified in several of the Payne Fund studies three decades earlier.

While family-related variables like income and education provide demographics that relate to children's knowledge and behaviors, they do not provide a picture of the complexities of interpersonal relating within a family; naturalistic observations are best suited to establish these data (Desmond et al., 1990; Lull, 1980; Lytton, 1980). During the 1950s when American families rapidly adopted television, the social and behavioral sciences favored positivist paradigms and methods that relied on quantitative techniques. Phenomenological approaches to understanding familial influences on children's television viewing, like naturalistic observation, did not flourish during the 1950s. Social learning theory, with its associationism/learning theory roots and efforts to isolate subjects from previous experiences, shaped

early research on television effects on children. Children's television experiences generally were not studied within the context of family variables.

A series of laboratory experiments conducted by Bandura and Ross (1963) established a strong relationship between young children's exposures to television models/behaviors and subsequent performance of the same behaviors. Identification with a model implies an intricate set of prior experiences; for most young children the greater part of that experience occurs within a family context. Bandura's research lead to the observation that certain factors inhibited or disinhibited the child's performance of the observed behavior (Bandura, 1977). For example, a child's identification with characteristics of a particular model/actor had a disinhibiting effect on the child's performance of behaviors displayed by the model/actor. Not until cognitive approaches to learning became more common in the late 1960s and the 1970s did media effects researchers begin to explore the intricate influence of prior experiences and social contexts on children's learning.

By 1969, Blumer, in his work *Symbolic Interactionism*, voiced serious reservations about the direction of television effects research. He addressed the impoverishment of the effects paradigm in mass media research. He came to this argument well-qualified, as one of the original Payne Fund researchers and a "Chicago school" disciple of social psychologist G. H. Mead, whose ideas formed the foundation of symbolic interactionism. Blumer argued against the accumulation of trivial information. Critics like Blumer claimed that the S-R paradigm had driven researchers away from real life and that it was vital to the future of this research that researchers go out and

carefully observe the phenomena they purported to be studying. He emphasized that this type of first-hand observation was not antithetical to empiricism but was truly empirical and should form the basis of research grounded in fact.

Blumer (1969) acknowledged that the lack of this first-hand observation of social contexts was attributable to a lack of sponsorship and support for this type of phenomenological research. Social science researchers were not being funded for ethnographic-style field research that did not purpose to gather inferential statistical findings. Yet he argued without this rich foundation of observed phenomena from which to derive meaning, we cannot truly understand the complex interactions of media and daily life.

More recently, observational and in-depth interviewing methodologies have provided traditional effects research with a phenomenologically based perspective on the interplay of family variables, television exposure, and children's behaviors (Brody & Stoneman, 1983; Reid, 1979; Reid & Frazer, 1980). James Lull (1980), a major investigator of family uses of television, initiated naturalistic, observational, and in-depth interviewing methods to determine concrete practices of family interaction around television. This research represented a growing trend toward including how "certain environmental conditions facilitate the learning of attitudes, knowledge, and behavior patterns from television by children in preschool and early school years" (Desmond et al. 1985, p. 462).

The long evolution of children and media effects research has allowed researchers to build on trends established by surveys, findings observed in

laboratory experiments, and ethnographic/observational research conducted in natural settings. The importance of the family, particularly interactions between children and parents in modifying the influences of television viewing, are well documented by investigations across these methodologies (Comstock & Paik, 1991). However, despite a long tradition of research on children and media effects, the challenge of Lazarsfeld's call for ". . . studies which would result in ideas as to how the average family can create an atmosphere which will compete with television" (p. 250) remains to be met.

Parent-Child Interaction about Television

Family variables have been identified as influencing the effects of media messages on children for more than five decades (Charters, 1933; Desmond et al., 1985; Chaffee, McLeod, & Atkin, 1971; Murphy, Tally, Huston, & Wright, 1991; Schramm et al., 1961)). Studies examining the relationships between parental mediation and children's responses to television viewing may be considered in a variety of ways. In this review, studies will be discussed according to methodological categories. In the examination of any social science topic, different methodological approaches contribute complementary information--from broad societal trends to intimate observations. These data may be pieced together to present a more complete understanding of the subject under inquiry.

Surveys

Large-scale surveys have provided a broad perspective about parental influences on children's television viewing. In surveying parents, several variables have been identified that appear closely related to children's media

use, knowledge, and behaviors; these are parental income/social economic status, education, and viewing habits (Bower, 1985). Also of interest are parents' self-reports of their attitudes and behaviors concerning active mediation of their children's viewing, including nonrestrictive interactions like conversations about programming and restrictive mediation like regulating viewing quantities, and selections (Adler et al., 1980; Atkin, Greenberg, & Baldwin, 1991; Yankelovich, 1970).

Parents' income. Parental income correlates to the amount of nonrestrictive mediation, with higher incomes associated with greater nonrestrictive mediation as reported by parents in a survey of 421 Midwestern 5th- and 10th-grade students and their parents (Atkin et al., 1991). In the same survey, lower parent income was related to greater amounts of children's television viewing (Atkin et al., 1991). Children in African-American families are more likely to be heavier viewers of television regardless of income (Anderson & Williams, 1983).

Parents' education. Survey data relating parental education to viewing are mixed. Many studies indicate a negative correlation between parent education and family viewing (Comstock, 1978; Timmer et al., 1985). According to a survey of 219 low-income parents of 2- to 4-year-old children, total viewing is negatively associated with education, income, and occupational status (Murphy et al., 1991). Another survey, however, found no relationship between television viewing amounts and parent education (Atkin et al., 1991). The likelihood that parents report having

rules about television viewing increases with their education (Medrich et al., 1982).

Family media use. Viewing habit data are not surprising. The more television parents view, the more their children view (Desmond et. al., 1985). Children of more educated parents watch less adult programming (Murphy et al., 1991). Children from single-parent families view more television than children in two-parent families (Webster, Pearson & Webster, 1986). Based on a Canadian sample of 330 5- to 12-year-old children, the more television sets families have, the more children view alone and the less parents regulate their viewing (Baron, 1985). But coviewing only modestly predicted any kind of parental mediation or conversational involvement (Brody et al., 1980; Dorr, Kovaric, & Doubleday, 1989). Parents and children were observed to touch more during coviewing than during parent-child playing (Brody et al., 1980).

Parental mediation. As Comstock and Paik (1991) indicated, assessments of parental mediation patterns from survey and questionnaire data reveal a paradox. Approval for parental mediation is high, while reports of mediation are low (Bower, 1973). In a survey of consumer attitudes toward regulating children's television advertising, 93% of the respondents said that they believed it was up to parents to regulate their children's television viewing behavior (Cully, Lazer, & Atkin, 1976).

In Corder-Bolz 's (1980) survey of 3,321 Texas families, 52% of parents said they often or always tried to limit the number of hours children watched; 69% said they often or always regulated the type or programming children

watched, and 55% said they often or always talked to their children about television content.

In a nationwide survey of 2,000 Americans 18 years and older sponsored by CBS, less than 50% of parents of children 4-6 years old reported that they "often" regulated their children's viewing (Bower, 1985). The survey included many questions about television limits, including limiting time spent watching, regulating what children watched, and changing the channel when the program was objectionable. A comparison of data from the 1980 CBS audience survey and earlier versions of the survey conducted in 1960 and 1970 revealed that parents reported slight increases in having rules about viewing amounts and selections for children 4-9 years old (Bower, 1985).

Experimental Studies

Despite the low levels of parental mediation indicated by survey data, many researchers report positive associations between parents' mediations and children's learning from and comprehension of televised content. Parental mediations have been demonstrated to influence children's cognitive gains from television exposure, behavioral responses to televised content, and children's social cognition in regard to televised content.

Cognitive skills. Children's learning of cognitive skills from television is enhanced by adult/parental mediations that are relevant to the "lesson." Children whose parents interacted with them during viewing of Sesame Street learned more than children whose parents did not interact (Ball & Bogatz, 1970). Cognitive skills like letter and number recognition were

enhanced by parental interactions during viewing of Sesame Street (Cook, Appleton, Conner, Shaffer, Tamkin, & Weber, 1975; Lesser, 1974). Collins et al. (1981) found that second grade children who watched a drama with an adult who pointed out implicit plot features scored better on understanding the narrative than children to whom the adult coviewers made neutral comments.

In a series of laboratory studies by Corder-Bolz (1980), the effects of adult mediation on children's cognitive skills and social perceptions were examined, including reading skills from Electric Company, perceptions of gender roles from All in the Family, and perceptions of violent acts from Batman (Corder-Bolz, 1980). The author found that the interaction of a teacher's aide regarding reading skills content greatly enhanced the instructional value of a program for a child, but only with content that children were ready to learn. Another study compared children who watched an All in the Family episode with and without a parent-surrogate mediator reinforcing the nontraditional sex roles in the program. Children were pretested one week in advance of the viewing session and posttested immediately and one week after. Children in the mediated condition scored highest in acceptance of non-traditional sex roles.

Behavior. The effectiveness of parental mediation on children's behavioral responses to television commercials were tested in a laboratory study with third grade boys and their mothers (Prasad, Rao, & Sheikh, 1978). When children and their mothers came to the testing center, the boys were told to wait in a room with a television set while the mothers were

interviewed. Children in the experimental condition viewed a program with one of two toy commercials, either for a very attractive toy or for a less attractive toy. Mothers were coached to discourage children's interest in the toys by either using a power-assertive or a reasoning manner. When mothers and sons were rejoined a half hour later, the experimenter left them alone under the guise of setting up a game for the child. During the "wait," mothers presented counter-information about the advertised toy to the child. Children were then lead into a "toy store" room where they could opt to get the advertised toy, an unadvertised toy, or cash.

Results indicated that the children whose mothers reasoned with them were less likely to buy the toy only in the case of the less attractive toy. Children exposed to the power-assertive counter-argument chose the advertised toy more often than children in the control condition. These results lead to the conclusion that parental reasoning can influence children's behavioral responses to commercials, but when the product is very attractive neither parental reasoning nor power-assertiveness are influential and power-assertiveness parental interactions are not effective regardless of the toy (Prasad et al., 1978).

Social cognition. Other studies have demonstrated that social cognition may be enhanced by parental mediation of television viewing. When children were shown prosocial and antisocial programming, children whose mothers pointed out alternatives to violent action and who used appeals to children's pride were more likely to react to conflict in a prosocial manner than children of mothers who threatened children with negative consequences (Abelman,

1985). Guiding children as they watch family shows to notice prosocial interactions can influence the beliefs children hold about how family members behave in the real world (Buerkel-Rothfuss et al., 1982). Positive, encouraging family communication patterns coupled with specific television rules are associated strongly with children's comprehension of television's visual conventions, plot comprehension, and understanding commercials (Singer et al., 1988).

Another of Corder-Bolz's (1980) experiments compared children who viewed the Batman episode with and without a parent-surrogate mediator. The mediator devalued the violence and discussed alternatives to violence for solving problems. When posttested, children in the mediated condition were less likely to report that hitting and stealing were all right. From these studies Corder-Bolz concluded:

As parents and other adults verbalize their interpretations and evaluations of television programs and commercials to their children, the children will internalize these critical viewing skills, which can ultimately make television a more positive part of their lives. (p. 118)

Family communication style. Experimental and survey studies have been helpful in establishing relationships as well as the cause and effect of parental mediation on children's outcomes. These studies reveal the important influence of family communication styles on children's media use (Chaffee & McLeod, 1971). A measure of family communication patterns (FCP) developed by Steven Chaffee and Jack McLeod (1971) has been popular with mass communication researchers (Lull, 1982; Nwankwo, 1970). The Family Communication Pattern (FCP) typology locates family communication along two dimensions. One dimension which encourages discussion of

controversial topics and self-expression is labeled "concept-orientation." The other dimension which discourages children from expressing anger or disagreeing with parents is labeled "socio-orientation." Despite successes in establishing correlations between this measure of family communication style and children's cognitive and behavioral responses to television viewing, the FCP has been criticized as not tapping more "important dimensions of family interaction" (Alexander, 1990, p. 212).

Qualitative Studies of Parental Mediation

Dissatisfaction with the limitations of survey and experimental methodologies for revealing dimensions of family interaction have lead researchers to investigate with qualitative methodologies. Messaris and Sarett (1981) conducted in-depth interviews with 26 parents as a basis for hypothesis development about parent-child interactions involving television content. From these interviews and reviews of previous studies, they developed a theoretical framework for studying the relationship between parent-child interactions about television content and the development of children's interpretational skills and behaviors.

Several consequences of parent-child interactions about television were categorized, including changes in the way the child interprets televised content, changes in the child's inventory of cognitive categories about the real world, changes in the child's pattern of interacting with the environment, and changes in the child's social relationships. As hypothesized, in each instance, parental mediation intervenes between the child's perception of the televised content and the child's cognitive process. The intervention results in

changes in one or a combination of knowledge, behaviors, or attitudes. Although a systematic approach to testing these hypotheses is lacking, evidence of the validity of Messaris and Sarett's hypotheses is found throughout the parent-child and television literature.

In the late 1970s some mass communication researchers began employing ethnographic methods like naturalistic in-home observation and in-depth interviews for studying families and mass communications (Brody & Stoneman, 1983; Brody et al., 1980; Lull, 1980; Messais & Sarret, 1981; Reid & Frazer, 1980). These studies contributed detailed, intimate, empirical data about the interactions of families around television viewing. Examples of children's interactions with parents and siblings about televised content are included in many of these studies. These data, by providing observation-based accounts of family interaction may contribute to the conceptualization of non-ethnographic studies as well.

Reid and Frazer (1980) used observational techniques to study children using television in their play. Their report includes numerous examples of transcribed interactions between children as they watch television. These examples clearly support their conclusion that co-viewing siblings "use television and its content as social objects" as they play (p. 71). One interaction is particularly relevant to the present investigation:

(Charles age 5 and Ed, age 4, are watching a Saturday morning cartoon show. The program is interrupted by 3, 20-second commercials.)

CHARLES: O.K. What's this about (Points to screen)

ED: It's a commercial.

CHARLES: What's it trying to do?

ED: Get me to ask mommy for the cereal . . . you dummy. (p.70)

In interviewing Ed and Charles's parents, the researchers learned that the parents actively taught their children about the nature and purpose of television commercials. The above example shows the older child quizzing his young sibling about commercials just as he has seen his parents do. Frazer and Reid took a symbolic interactionist approach to this research, pointing out that children treat televised content like social objects to be discussed, interpreted, and manipulated. This example also reflects the principle of social learning theory as we see that the older sibling has learned the quizzing behavior from his parents and is capable of impressive imitation.

Lull (1980) studied television viewing in the lives of more than 200 families of varying social economic status. Participant-observers spent from 2 to 7 days with families observing their media use. Families were not aware that observers' were focusing on media use. At the end of the observation period, each family member was interviewed in-depth. Social uses of television in the home were categorized as either structural or relational. Structural uses included using television as an environmental background and as a way to punctuate time and family activities. Of interest in the current investigation are the relational uses of television identified by Lull. Relational uses refers to the ways that family members use television in their relationships with one another. Four types of relational uses were observed: communication facilitation, affiliation/avoidance, social learning, and competence/ dominance. Communication facilitation embodies the use of televised content as referents in discussion:

Children, for example, use television programs and characters as primary known-in-common referents in order to clarify issues they discuss. . . . A child often uses television in order to enter an adult conversation . . . by using a television example which illustrates the point being made by one of the adult interactants. (p. 202)

Television facilitates conversations by providing a common "experience" that everyone can refer to and talk about. The conversations that ensue around television viewing tend to be prolific but not substantive. Lull noted, however, that the advent of more controversial programming in the late 1970s provided opportunities for family members to clarify attitudes and values. Some parents used themes and values portrayed in television shows to help socialize their children into perspectives consistent with their own. They did this by encouraging or discouraging viewing, informal evaluation, and discussion.

Another relational use is affiliation/avoidance, which refers to use of television to enhance or deter interpersonal contact among family members. Family members touch more while watching television, but they may also use television viewing to escape interaction (Lull, 1980).

The two relational uses of television most pertinent to parent-child interaction are social learning and competence/dominance. In Lull's research some television programming provided a source of social learning. Parents encouraged children to watch educational programs that provided lessons in cognitive skills. Parents also used themes presented in television programming to "educate their children about the topics being presented in accord with their own view of the world" (Lull, 1980, p. 205). In addition to encouraging educational and prosocial viewing, parents also regulated

children's viewing by limiting viewing times. Parental regulation of children's viewing was placed within the category of relational use that Lull referred to as competence/dominance. This refers to the opportunities provided by television programming for family members to demonstrate competence and dominance in their roles. For example, parents may limit and select their children's television viewing to reflect their parental values.

Another way in which television use may enable family members to display role competence is by referencing to the symbolic portrayals of television characters as confirmation of parental roles. Also, some viewers enjoyed criticizing and correcting newscasters and other "authorities" as well as pointing out editing incongruities and other technical flaws as a way of displaying their competence to other family members. Family members also used television to dominate others by controlling programming choices or withdrawing access to television as a punishment.

The categories delineated by Lull (1980) provided a picture of family communication and television use that confirms the central role of television in family life and the complexity of family members' interactions around and about television uses. The uses of television as a source of conversational referents, social learning, and parental regulation are basic assumptions in the conceptualization of the present investigation. For each family, these uses vary in proportion and emphasis and patterns of parent-child interaction related to television use emerge.

A Multi-Method Longitudinal Study

Large scale, longitudinal research on media effects and children have sometimes combined survey, experimental, and ethnographic methods within studies to refine hypotheses about family influences on children's television viewing (Lull, 1982; Singer et al., 1988). "Television and Family Living Pattern," a 3-year longitudinal study conducted by Jerome and Dorothy Singer, Roger Desmond, and their associates combined survey data, laboratory investigation, and naturalistic observation in preschools and homes. Data from this study provides important background for the current investigation and therefore will be described in detail.

From the literature, Desmond et al. (1985) identified three categories of communication that have been observed during and after children view with others: criticism/interpretation, rule making, and disciplinary intervention. Coviewing between parents and preschool children potentially provides opportunities for discussing prosocial and cognitive content; however, coviewing does not necessarily predict these positive mediation and occurs least often with younger children "who need mediation the most" (Desmond et al., 1990, p.49).

The purpose of their work was to discover behavioral and cognitive consequences of family mediation. They defined mediation as "some form of active effort by parents and others to translate the complexities of the physical and social environment, as well as the television medium, into terms capable of comprehension by children at various levels of cognitive development" (Desmond et al., 1985 p. 463). They were particularly

interested in the relationships between parental mediation/discipline styles and children's cognitive skills in understanding television.

Their analysis was based on data gathered from 66 urban kindergarten and first-grade children and their parents who were studied over a 3-year period. The authors collected data from parents using a variety of methods, including 10 days worth of family diaries detailing all family activities including media use, parent-child interaction questionnaires, parent questionnaires about media use, media rules, discipline styles, parents' perceptions of their child's aggressive behaviors, and a self-report measure of parents' resourcefulness.

The children were tested using the Peabody Picture Vocabulary Test and three scales of the Peabody Individual Achievement Tests to assess reading recognition, comprehension, and general knowledge. Children also were tested on their ability to discriminate between television fantasy and reality, ability to follow plots, knowledge of television special effects, knowledge of the purpose of commercials, and perceptions of family television viewing rules. Open-ended responses to pictures of families interacting in various situations were elicited from the children. Observational measures of children's restlessness were made by research staff while children were "waiting" to be tested at the research center. In addition, 26 families of the children rated as the heaviest television viewers were visited by researchers and in-home observations of parent-child interactions were made.

The Parent-Child Interaction Questionnaire (P-C Q) was designed to assess parents' mediation style. Items on the P-C Q described a variety of

situations in which parent-child interactions take place. Two responses to each situation were described and parents were asked to check the response that was closest to how they might respond. Results of the P-C Q yielded a bipolar factor, description versus prescription. Parents who scored high on the description end of the dimension indicated a preference for explaining, pointing things out, and allowing the child to participate in decisions; parents who scored high on the prescription end of the dimension indicated a preference for using moral judgment and discipline. The authors reported that "our sample could be characterized as varying along a dimension reflecting either a serious effort to discuss and explain the world to children (descriptive), or one in which the primary modes of communication are related to control or moralizing (prescriptive)" (Desmond et al., 1985, p.469).

To assess parents' disciplinary style, a situation was posed (e.g., the child talks back to parent) and parents were asked to indicate the likelihood on a four-point scale ranging from "never" to "usually" of their taking 12 possible disciplinary actions. Two styles dominated the parental response patterns: a power-assertive discipline style and a love-withdrawal discipline style. High power-assertive responders were characterized as preferring a rule-oriented, authority-based discipline style. High love-withdrawal responders were characterized as using the withdrawal of emotional support as a discipline method.

The authors found that a descriptive family mediation style was positively associated with child intelligence, parent resourcefulness, and the

child's ability to distinguish fantasy from reality. Descriptive mediation style was negatively correlated with the child's total hours of viewing television.

Children's reality versus fantasy scores were related positively to their IQ scores, their reports of television rules in the home, a power-assertive parental discipline style, and descriptive family mediation. Children's ability to discriminate between reality and fantasy was related negatively to amount of weekly television viewing. Understanding zooms was associated positively with a power-assertive discipline style, descriptive mediation and parental resourcefulness. Children's heavy television viewing was associated positively with the mother's heavy viewing, little discussion or explanation in the family, and a large emphasis on psychological discipline.

Children's comprehension scores (based on open recall of a movie they were shown at the research center) were related positively to parent's self-reports of their coviewing guidance and explanation, children's projection of mothers' positive comments in response to the projectile test family situation pictures, and children's reports of parents' rules. The type of family environment associated with low comprehension included heavy child and parent television viewing, low general mediation, and a love-withdrawal form of discipline. The child's general information drops as family discussion lessens and viewing increases. The best preparation for a child's grasping the role and function of commercial messages on television, regardless of the amount of the child's television exposure, appeared to be parent's high descriptive tendency.

Results indicated that a family communication pattern of discussion and explanation in Year 1 was positively related to several measures of children's television comprehension in Year 2. When combined with positive-assertive methods of discipline, descriptive style was related positively to reading recognition. Descriptive style was related negatively to children's hours of viewing and parental assessments of the child's aggression in Year 2. The correlational and multiple regression analysis consistently indicated that a parental style of description versus prescription proved the most influential independent variable on both cognitive and behavioral dependent variables. Although this correlational study confirmed a positive association between parental mediation in children's comprehension of the purpose of commercials, claims for a causal relationship could not be made.

Data collected as part of this study also were analyzed to determine any gender differences in relationships between parental mediation and children's television comprehension, viewing quantity, and aggression (Desmond, Hirsch, Singer & Singer, 1987). In the sample of 66 children, half male and half female, Desmond et al. (1987) found some significant gender differences. Relationships between parent-reported television-specific mediation, general television comprehension, and comprehension of commercials differed significantly between boys and girls. The major finding was that parental mediation correlated significantly more strongly with boys' program comprehension, knowledge of commercials, and their persuasive intent than for girls'. This evidence implied that boys who demonstrated

high television comprehension were receiving relatively high levels of parental mediation and that the same was not the case for female subjects. In addition, negative correlations between parental mediation and children's observed restlessness and aggression were greater for boys than for girls. One explanation for this finding offered by the authors was that boys have lower initial levels of television comprehension and therefore more to gain from high levels of parental mediation.

Studies on Parent-Child Interaction about Advertising

The relationship between young children's television advertising comprehension and parental mediation of viewing has been demonstrated (Desmond et al, 1985). Much research on the effects of advertising on children was conducted during the 1970s, in response to public controversy about the ethics of advertising to young children. Among the variables investigated was the role of parental mediation (Adler et al., 1980; Reid, 1979; Robertson, 1979; Ward et al., 1977).

Ward, Wackman, and Wartella (1977) conducted a study of children's consumer socialization and television advertising by interviewing 615 parent-child pairs about family situations related to consumer behavior. They looked to earlier socialization research and determined that "the family is a more important influence on consumer socialization than television advertising" (p. 27). They took a situational view of children's consumer learning, borrowing from Kohlberg's conceptualization that trial-by-trial changes in children's situation behavior is related to trial-by-trial training inputs of parents. This large-scale study of consumer socialization,

combining questionnaire and observational data, provided evidence that maternal mediation was the single greatest influence on children's consumer socialization (Ward et al., 1977).

A laboratory experiment demonstrated that children's toy purchase choices could be influenced by prior parental discussion about the toy (Corder-Bolz & O'Bryant, 1978). An in-home observational study revealed that children's responses to television advertising could be influenced by specific parental rules for television viewing behavior (Reid, 1979). For example, not allowing children to ask for products during commercials or to mimic commercials seems to reduce product requests presumably because it reduces recall (Reid, 1979). In a review of literature about parental mediation of television and advertising effects, Robertson (1979) concluded that "the impact of advertising is a function of a complex set of family, child, and situational factors" (p. 24).

Children's responses to television advertising were found to be related to parental discussion about consumption of goods and services (Ward & Wackman, 1973), parental approval of the advertised product (Atkin, 1978), and differences in family environment associated with parental education (Robertson & Rossiter, 1974). A regression analysis suggested that for kindergarten children, mother-child interaction is the most important factor contributing to consumer skill development (Ward et al., 1977). These authors also found positive relationships between parental social economic status (SES), mother's explanations of refusals to buy, and increased interaction about consumption in general.

Typically, three progressive levels of comprehension are associated with children's understanding of television advertising, including the ability to discriminate commercials from programming, an understanding of the selling intent of commercials, and understanding that commercial messages have the potential to mislead or deceive the viewer (Comstock & Paik, 1991).

Ability to discriminate between programs and commercials. Preschool children have demonstrated the ability to discriminate between programming and commercials, a skill that precedes the ability to define what a commercial is (Levin et al., 1982). In one study, for instance, subjects were 72 predominantly white preschool children from urban lower-middle class families. The researchers showed children a video tape comprising a series of 28, 10-second, randomly mixed segments including 7 adult commercials, 14 program segments, and 7 children's commercials. Segments were separated by 3 seconds of black. Children were asked to identify each segment as either a commercial or a program. Children as young as 3 years old were able to make the distinction between programming and commercials, and by the age of 5 most children were able to identify commercials 77% of the time and programming 67% of the time. No significant differences in 3- and 4-year-old responses were found (Levin et al., 1982). Although this ability appeared fairly consistent by age 5 in most children, it did not reflect children's ability to articulate the intent of commercials.

Understanding intent of commercials. A second level of comprehension is understanding that a commercial message is trying to persuade the viewer to buy the product. A review of the literature showed that children younger

than 8 years old lack comprehension of the selling intent of messages (Paget, Kritt, & Bergemann, 1984). Robertson and Rossiter (1974) identified the cognitive factors that precede a child's understanding of intention as the ability to discriminate between commercials and programming, recognition of an external source, perception of an intended audience, and awareness of the symbolic nature of commercials--i.e., "the symbolic devices used to enhance the presentation of the product like idealized settings or dramatized character emotions" (p. 15), and experience of discrepancies between the actual product and the product as advertised.

Robertson and Rossiter (1974) studied children's ability to attribute persuasive intent to commercials. Their sample included 289 first, third, and fifth grade boys with social class backgrounds ranging from upper-lower to upper-middle. Data was collected through child interviews using open-ended questions. The researchers stated that they were "dealing with the child's inferences about what the communicator intends" (p. 13). A pilot study revealed that children attributed two kinds of intent to commercial messages, "assistive" and "persuasive." A child expressing assistive intent regarding a commercial might say "commercials tell you about things," whereas a child describing persuasive intent might say "commercials try to make you buy things" (p. 13).

Almost 53% of first graders and 99% of fifth graders recognized commercials' persuasive intent. Results also indicated highly significant correlations between cognitive factors hypothesized as being prerequisites for understanding persuasive intent. Symbolic perception was the primary

determinant of persuasive intent recognition. The results also supported the conclusion that "the child who is able to discern persuasive intent is less influenced by advertising in that he is less trusting, likes commercials less, and tends to make fewer consumption requests" (p.19).

In a study using role-taking ability as a predictor of understanding commercials, Faber, Perloff, and Hawkins (1982) compared the effectiveness of Piagetian logical operations and role-taking ability as predictors of understanding the purpose of television commercials. The authors hypothesized that understanding the purpose of commercials requires social cognitive skills more than physical cognition, the focus of logical operations.

The authors assessed first- and third-graders for both their level of logical operations and their role-taking ability. For the latter they used Selman's (1971) tool for assessing role-taking ability. Children were exposed to television commercials and then assessed for their understanding of the purpose of the commercials. Role-taking ability was correlated more highly than logical operations with understanding the purpose of the commercials, and both were associated more closely with understanding commercials than was grade level. This finding led the authors to conclude that the social experience implied by role-taking ability may be more predictive of children's understanding of commercials than age alone. They also suggested that this finding has practical implications for accelerating children's understanding of commercials through enriched environments and training (Faber et al., 1982).

Understanding deceptive potential of TV commercials. The most developmentally advanced level of children's comprehension of commercials is understanding the deceptive potential of commercial messages. Recognition that the commercial message about the product may differ from the product itself has been used as a criterion for determining understanding of deceptive potential. Among first-grade boys in the Robertson and Rossiter (1974) sample, only 12.5% perceived discrepancies between the product and message. Among fifth-grade boys, however, 78.7% realized these discrepancies. This large difference suggests that between the ages of 6 and 10, children's understanding that commercials can be deceptive increases dramatically. This understanding has been linked with children's increasing ability to engage in recursive thinking.

In a study of children's comprehension of commercials, Paget, Kritt, and Bergemann (1984) employed the concept of "recursive thinking," which refers to the ability to think about thinking. This ability is particularly applicable to children's comprehension of the deceptive potential of commercials. Recursive thinking may simply refer to a 1-loop process of thinking about thinking, or to the more complex process of thinking about someone else thinking about your thinking, referred to as 2-loop recursive thinking (Miller, Kessel, & Falvell, 1970). Paget et al. (1984) propose that advertising situations are "quintessential examples of recursive thinking in its true ecological form" (p. 147) because the advertiser must anticipate the consumer's thoughts in influencing them to buy. The ability to engage in 2-loop recursive thinking suggests that the viewer may understand that the

advertiser can think about how to manipulate the viewer into buying the advertised product--e.g., by making the product look better than it is in real life. Although an early study found that 40% of 11-year-old children could demonstrate 2-loop recursive thinking (Miller et al., 1970), the literature suggests that, in general, 2-loop recursive thinking is not actualized until adolescence (Paget et al., 1984).

In their experiment, Paget et al. (1984) showed children a commercial portraying a 10-year-old who bribes his younger sibling into eating his "healthy" cereal. The authors wanted to discover how a third party observing this interaction understands its purpose and implications. At issue is the child viewer's ability to think about how others are thinking about manipulating them, or 2-loop recursive thinking. To measure their subjects' recursive thinking ability, they tested each one individually after showing them four versions of the cereal-bribing commercial described above. Questions required subjects to think about the behavior portrayed and about the thinking behind the portrayal of that behavior.

The authors found that recursive thinking scores were higher for each successive grade level, and that the main developmental changes occurred between kindergarten and third grade for increments in 1-loop recursive thinking and between sixth grade and college for 2-loop recursive thinking. Paget et al. conclude that "the development of 2-loop recursive thinking is "decidedly a protracted affair that continues well into adolescence, supporting the results of Miller et al. 1970" (p. 156). They also concluded that although school-age children do not understand the persuasive

strategies used in television advertisements of children's products, they do understand the manipulative intent of the messages (Paget et al., 1984).

Theories that Help Explain How Parent-Child Interaction Helps Preschool Children Understand Television Commercials

The review of literature related to parental-interactions and children's comprehension of advertising suggests that young children learn about televised content through exposures to the medium and interactions about that content within their social milieu. Observational learning, social interaction, and developing social cognitive capacities are key processes involved in children's learning about television content, including advertising. Each of these processes has been posited theoretically and explored experimentally. Social learning theory relates to how children learn behaviors from watching television as well as to how they learn to watch television from observing their social milieu. Symbolic interactionism relates to how, through social interactions, children learn to treat televised messages as social objects that are interpreted through interaction with others. Social cognitive theories relate to how children's mental capacities develop and facilitate their understanding of both vicarious (e.g., televised) and real social interactions.

Social Learning

The human capacity for symbolization facilitates learning by observation (Bandura, 1977). Even very young children learn complex behaviors from observation (Bandura & Ross, 1963). During familial television viewing and current and subsequent parent-child interactions about that viewing, children observe and acquire symbolic representations from two sources: the

televised content and the behaviors of others regarding television. Bandura (1977) noted

the advent of television has greatly expanded the range of models available to children and adults alike . . . people today can observe and learn diverse styles of conduct within the comfort of their homes through the abundant symbolic modeling provided by the mass media. (p. 24-25)

A second source of observational learning is parents and other family members mediating and interpreting the meanings of televised symbols through verbal and non-verbal parent-child interaction. This interaction itself becomes a source of observational learning for the child. How much television parents watch and what they watch are highly related to children's quantity of viewing and viewing selections (Murphy et al., 1991). In addition, parents' tendency to discount television messages and discuss television content provide children with models of text interpretation (Lull, 1982).

Social learning theory research portrays children as rapid learners of behaviors they see on television; children can learn complex behaviors from a single viewing of a televised model (Bandura & Ross, 1963; Friedrich & Stein, 1973). Although children are seen as actively acquiring behaviors from observation, their actual performance of these behaviors depends in part on reinforcements. Performance of learned behaviors from television depends on intervening social variables like how much the viewer identifies with the actor and whether or not the actor is observed receiving reinforcements that are salient to the young viewer. When the child identifies with the actor, the reinforcement that the actor receives becomes a source of vicarious reinforcement for the child viewer. For example, it is more likely that a child will imitate what she has viewed if she identifies with the original media

performer of the behavior and sees the actor receiving rewards like affection and material possessions rather than punishment like physical harm (Bandura, 1965).

The viewer's identification with the characteristics like sex, social class, and age of a television model, that carry strong implications of prior social experiences, have been demonstrated to be a source of associations that enhance learning from television (Newcomb & Collins, 1979). It is interesting to note that these are the same intervening variables identified as modifying the influences of motion picture viewing in the Payne Fund studies (Charters, 1933) and in the Schramm, Lyle, Parker's *Television in the Lives of Our Children* (1961). In addition, the child viewer's tendency to be influenced by the actors' rewards and punishments, implies that the child has had real experience with those vicarious reinforcers.

Social reinforcers rely on a complex system of internalized attractions, repulsions, and responses based on the individual's prior experience. The meanings that these intervening variables have for individual viewers are implicit within their capacity to reinforce. The audience brings to these experiences an intricate history of associations that they have symbolized in their thought processes. For one child the image of a race car means going fast, for another it may remind him of a tragic accident. For one child, the image is a positive vicarious reinforcer, for the other a negative vicarious reinforcer. The vast prologue of prior experience that this phenomenon implies is not the focus of social learning theory. In later work, however, Bandura addressed the central role of the symbolic aspects of cognition in

determining human behavior (Bandura, 1977). He acknowledged that the influence of the individual's cognitive representations of consequences on their future behavior could be more powerful than experienced consequences. As Bandura altered his description of social learning from its operant conditioning roots to a cognitive conception of learning, he increasingly embraced the importance of symbolic representation in the formation of beliefs and actions. Although Bandura's elevation of the importance of symbolic processes came later in his exploration of human learning, for other scholars symbolic processes had always held a central role in how they conceptualized the formation of human thought and action.

Symbolic Interactionism

G. H. Mead developed a theoretical description of a process whereby the meanings of things, including people, objects and events, arise from interactions between people. Mead saw people, events, and things as "social objects" to be manipulated like objects, and their meanings as "social products," formed through the defining activities of people as they interact.

This theoretical approach was coined symbolic interactionism by Mead's student, Herbert Blumer (Blumer, 1969). Mead based his theory on the premises that

- (1) human beings act on the basis of meaning
- (2) learning is derived from interaction with one's social milieu
- (3) meanings can be interpreted and modified through interaction with self and others. (Blumer, 1969, p. 2)

The second two premises are most germane to understanding how children may derive meaning about televised content through parental mediation. The second premise, that learning is derived from interacting

with one's social milieu, envisions individuals learning by interacting within a social context. This scenario describes children participating in family life. The activities of family members occur predominantly in response to, or in relationship to, one another. Mead identified two levels of social interaction: a nonverbal level; i.e., "the conversation of gestures," and a verbal level; i.e., "the use of significant symbols" (Blumer, 1969, p.8). The former refers to interaction that does not rely on the language's verbal symbols but rather emphasizes actions like the "gestures" of changing the channel from a violent program or turning off the television set. These gestures do not rely on verbal interpretation, but they do convey powerful meanings. That children learn behaviors regarding television viewing from parent's viewing selection and quantity of viewing has been demonstrated repeatedly in studies showing high correlations between parental and child viewing patterns (Desmond et al., 1985; Timmer et al., 1985).

Mead's third premise, "that meanings can be interpreted and modified through interaction with self and others," (Blumer, 1969, p. 2) may be related directly to parent's verbal mediation of televised content. Blumer describes interpretation as a formative process that uses and revises meanings as tools for forming and guiding action. The child who grows up within a social milieu; i.e., a family, where the meanings of television content frequently are discussed will interpret that content not only based on exposure to the televised messages but also based on these familial interactions. Through interactions within the family milieu, television messages become "social objects" with meanings that are manipulated like objects through a process of

interpretation and re-interpretation that occur during social interaction. For example, a television commercial's verbal text may declare that a pair of shoes will enable you to jump higher and run faster, but the parent may revise that intended meaning and interpret it as hyperbole. It is this revised meaning, not the advertisers' intended meaning that guides the parents's action--e.g., her decision whether or not to purchase the shoes when her child requests them.

Meanings themselves are social products. Television content, like the meaning of "anything and everything has to be formed, learned, transmitted through a process of indication" (Blumer, 1969, p. 12). And like any object indicated through the social process, this content can undergo change in its meaning. Research on parental mediation of television viewing has shown that pointing out prosocial interactions to children as they watch family shows influenced what children believed about real world families' behaviors (Buerkel-Rothfuss et al., 1982).

In a family milieu where television messages are discussed and meanings are interpreted by family members, the child will derive meanings from family members' interpretation. Children's understanding of television and ability to discriminate between reality and fantasy are enhanced by critical discussions and interpretation of television content in concert with restrictions on viewing amounts and selections (Desmond, et al., 1990). Similarly, by enthusiastically pointing out violence or dangerous behaviors depicted on television or passively watching a steady diet of violent

programming, parents may impart antisocial meanings to their children (Desmond et al., 1990).

To better understand the influences of observing family behaviors and parent-child interactions on children's responses to television viewing, we must go beyond the explanatory power of social learning theory and symbolic interactionism to include theories that explore the processes whereby children develop knowledge and skills about social interactions, a process known as social cognition.

Developmental Social Cognitive Theories

Theories of social cognition share the assumption that individuals develop sets of cognitive skills that are central to inferring what other people are thinking, feeling, intending, seeing, and what they are like as a person (Shantz, 1975). Over the past two decades, information processing and cognitive models of knowledge acquisition have provided television researchers with approaches to studying television's influence on children. Piaget's stages of cognitive development were used to predict children's varying abilities in dealing with attention, perception, and logical operations relevant to television viewing (Bachen, 1981). During the early 1980s several authors assessing the status of research into children's comprehension of television called for the inclusion of social cognitive development constructs in the study of how children understand television (Bachen, 1981; Collins, 1983; Salomon, 1983). These authors each acknowledged that a child's ability to understand social interactions is crucial to her understanding of

television programming. Andrew Collins, one of the most prolific researchers of children's cognitive process and television, wrote in 1983:

Several questions should be addressed: How do children represent social information from typical shows? What inferences, evaluations, attributions, and expectations about persons and behavior are formed during viewing? Under what conditions are portrayals perceived as relevant to self and/or others? How do patterns of social inferences and evaluations vary across age periods? (p.145)

Collins generated this list after a long period of inquiry by communication researchers who had examined behavioral and cognitive outcomes from television exposure, but who generally had not considered how viewing television interacted with children's developing social reality. Examinations of the impact of violent programming on children's aggressive behaviors, however, began to yield evidence that effects were mediated by children's past experiences (Newcomb & Collins, 1979). Although overtly aggressive behavior catalyzed by television has been documented (Singer & Singer, 1986), it is children's individual and social differences, not selective television exposure, that seem to mediate whether or not the child's television viewing will be followed by aggression. The research that evolved from the cognitive approach suggested that children's comprehension of television content is embedded in social experiences and cognitive development "from which knowledge and expectations about persons and events are built" (Collins, 1983, p.144). Young children's major social experience is their family interaction; thus the influence of family members' communications are essential to the child's developing social cognition. Further inquiry into these individual and social differences requires what Collins (1983) calls a broader approach:

This broader approach requires a framework for studying social inferences from television in which responses to characters, actions, and events are examined as a function of viewers' knowledge and expectations, within the general constraints imposed by developmental and individual capabilities for acquiring, retaining, and retrieving social information (p. 145).

Thinking and knowledge about oneself and others as individuals, relationships between people, social customs, groups, and institution may all be included in the consideration of social cognitive development (Flavell, Miller, & Miller, 1993). The ability to differentiate and coordinate one's own social perspectives and those of others, both cognitively and emotionally, develops from early childhood (Flavell et al., 1993). Until recently, social development among 1- and 2-year-old children tended to be ignored as a topic for study (Dunn, 1988). Dunn attributes this omission to developmental psychologists' past Piagetian bias. Understanding becomes more explicit as the child develops. The more familiar the interaction, the more likely that the child will be observed demonstrating understanding of the causes of emotions in other family members (Dunn, 1988).

Just as new observations reveal that Piagetian descriptions of young children's cognitive capacities may be underestimations (Dunn, 1988), new observations of children in relation to television viewing suggest that young children can understand television with far greater sophistication than previously noted (Wolf, 1984). At the age of 4 some children understand the basics of television conventions remarkably well; for example, one 4-year-old female day care participant, when asked to explain a credit roll being shown at the end of a television program, replied

Shows things, something like who makes it and all that. You can see all the letters, they spell the names, the people we don't see, but the ones we see on the show, too. (Wolf, 1984, p. 254)

By school age, children's prior experiences accumulate, and they begin to understand that television reality differs from the real world (Wolf, 1984; Woolley & Wellman, 1993). Their experience with the conventions and messages of televised content, like advertising, have also accumulated.

Young children's understanding of television advertising reflects a progression of comprehension from the simple ability to discriminate between commercials and programming, to understanding the purpose /intention of commercials, to understanding advertising's deceptive potential. A prerequisite for understanding intent and deceptive potential is that the child grasp that another person has thoughts and that these thoughts may be different from her own. This capacity is referred to as theory of mind. Having grasped this concept, the child can understand that the people who make the televised message may have some intent, and that intent may be to influence her behavior.

Any understanding of television must involve understanding the nature of symbolic representation (e.g., that a moving picture may represent the real thing, while not being the real thing). This capacity is referred to as the ability to make an appearance-reality distinction. This understanding, coupled with the child's developing theory of mind (that another person has thoughts and that these thoughts may be different from the child's own thoughts), may be thought of as necessary steps toward a child's

understanding of television commercials. As the child acquires these abilities, they are able to apply it to all aspects of their environment, including the source of symbolic images that typically commands their attention three hours a day--television.

When a child combines the understanding of the difference between appearance and reality and the understanding that other people have thoughts, intentions, and feelings different from their own, they may begin to understand that the people who make the commercial messages have intentions that may affect them (the children). Then, as children grasp the more complex theory of mind development--that others can have thoughts about their own (the children's) thinking (i.e., two-loop recursive thinking) and that these others can manipulate reality to deceive the viewer--children may come to understand the deceptive potential of commercial messages. Studies examining young children's theory of mind help elucidate how these capacities develop.

A basic development in a child's theory of mind is a capacity for understanding that one stimulus may be understood in more than one way--e.g., that an image represents a thing but is not the thing. For example, the image on television of a horse may be thought of as a real horse, to be coveted, or as a television image to be turned off. Flavell and his associates investigated children's understanding of the representational nature of television images (Flavell, Flavell, Green, & Korfmacher, 1990). They asked young children if dynamic objects, like the ocean and a running horse, and

static objects like a balloon and popcorn in a bowl, all seen on a television screen, would come out of the television if the top were removed. While the majority of 3-year-old children said "yes" to the questions about what things can do (affordance questions), the majority of 4-year-old children said "no." Children also were asked if these objects could be touched and if they were pictures or real. The majority of 3-year-old children said that the image on the television set was a picture rather than real.

In their discussion, Flavell et al. (1990) claim that almost all 4-year-old children gave clear and consistent evidence of understanding that the things they see on television are not actually present as solid 3-dimensional objects inside the set. This difference is thought to be due to a cognitive development during which the child shifts from seeing a represented object as isolated from any referent to their gaining understanding of mental representation. By mental representation it is meant the ability to understand that images in the mind refer to objects in the real world. When the child has the capacity for understanding the representational nature of the mind, she understands that the representation is not real, and she can talk about it.

A further sophistication of the capacity to understand mental representation is the ability to understand that something can be represented in two ways that may be contradictory. This capacity has been demonstrated in a variety of experiments that involve different referents and situations, but that have in common that correct interpretation requires the

child to understand that there can be more than one interpretation of how things are (Flavell, Miller, & Miller, 1993).

The child comes to comprehend not only that representations exist but that what is represented may not correspond to what is real. They also come to understand that the way something is represented in one person's mind may not be the same as the way it is represented in someone else's mind. Young children's emerging ability to think of a single referent in more than one way has been demonstrated in empirical studies involving a variety of tasks. These include understanding that another person's visual perspective yields a different view than one's own (Flavell, Everett, Croft, & Flavell, 1981), that the same person who appears mean in a photograph may be very nice or visa versa (Flavell, Lindberg, Green, & Flavell, 1992), that a person may hold a belief and act on a belief that is false (known as false-belief) (Wimmer & Perner, 1983), that a physical object may appear more than one way (e.g., a glass of milk may appear red through a red gel, but is actually white) (Flavell, Flavell, & Green, 1987).

Role-taking is another aspect of understanding that a single stimulus may be seen more than one way. Role-taking ability is defined as "the activity of and/or ability to take the position of another person and thereby infer his perspective" (Shantz, 1975, p.264). Selman (1971) described role-taking as understanding the nature of the relation between one's own perspective and that of another. According to Selman, a child's stage of role-taking ability indicates level of understanding of the nature of social relations. Role-taking ability is relevant to the comprehension of television

programming and advertising, particularly to inferring motives of characters, causes of action (Durham, 1984), and the intentions of advertisers (Faber et al., 1982).

The child's developing theory of mind includes coming to understand that a person may hold a false belief. This understanding is central to the concept of deception (Chandler & Hala, 1991). A controversy exists over when children begin to understand deception with suggestions ranging from 2 1/2 (Chandler and Hala, 1991) to 5 to 6 years of age (Wimmer and Perner, 1983).

Chandler and Hala devised a hide-and-seek game that allowed young subjects actively to misinform their opponents if they wanted. Children could lay down false footprints leading to hidden treasure and wipe away the "real" tracks to mislead their opponents as to where a treasure was hidden. Of 2- to 5-year-old children, 50% carried out a deception, and 20% verbalized the deception. Further experiments confirmed that the young children understood that their deception would lead their opponents to erroneously thinking about where the treasures was hidden (Chandler & Hala, 1991).

Determining whether we are being told the truth or a lie simply from observing the communicator requires abilities more complex than the demands of Chandler and Hala's game. Children and adults alike have great difficulty in determining whether they are being told a lie simply from observing the speaker (DePaulo, Stone, & Lassiter, 1985). Children must be able to make an appearance-reality distinction; i.e., that people may appear to do one thing or say one thing but in reality they are thinking another. In

addition, they must be able to entertain a mental representation of others as holding false beliefs (Rotenberg, 1991).

Despite preschool children's ability to carry out and understand the consequences of their own deliberate deception, most children do not seem to understand the deceptive potential of a television commercials until much later in their development (Robertson & Rossiter, 1974). This may be because commercials are constructed with every effort to convey the appearance of the truth. Until children's prior experience includes repeated opportunities to verify advertising claims against reality or to experience interactions among their family and peers that question and discredit the commercials' claims, they have insufficient cues that the message is not truthful.

Previous Interventions to Encourage Parental Mediation of Children's Television Viewing

Although constructive mediation of children's television viewing appears to be strongly associated with desirable outcomes for children, the results of interventions to encourage parents to mediate their children's viewing are mixed at best (Greenberg, Abelman & Cohen, 1990; Heald, 1980; Matthews, 1993). In one of the more successful interventions, a self-selected sample of 64 elementary and 43 middle school students were interviewed at school about their viewing preferences and behaviors. Parents of these children were interviewed by phone about their rearing practices, their perceptions of how their children thought about television, and demographic characteristics of the family (Heald, 1980).

Parents were randomly assigned to one of three experimental conditions or a control group. Parents in the experimental groups were sent a television viewing guide. One group received a guide listing only programs with only large amounts of violent content or other antisocial programming. Recommendations to forbid children to watch these programs were included. Another group received a guide with only prosocial programming along with recommendations to encourage child viewing of these programs, and a third group received a guide with a mix of antisocial and prosocial programming that encouraged prosocial and discouraged antisocial viewing. Guides were mailed to parents once a week over a six-week period. Parents were not aware that two months later children would be interviewed to determine their viewing during the experimental period.

When interviewed, children indicated that parents in the treatment conditions made significantly more programming recommendations than parents in the controlled condition. Parents who received the antisocial list discouraged antisocial viewing more than parents who received both antisocial and prosocial lists. Parents who received the prosocial list only discouraged antisocial viewing more than either of the other groups.

Other attempts to help parents increase mediation have been less encouraging. Parents who received television guides that included reviews of the programming and recommendations of good viewing selections for children ignored the information, and their children used the guides to seek out programming labeled as warranting parental discretion (Greenberg et al., 1990). Matthews (1993) combined preschool classroom presentations with

mailed information to parents about the content of each lesson. The mailed materials included suggestions for implementing strategies to regulate and mediate their child's viewing. A comparison of responses on a questionnaire to assess parental mediation and family communication patterns between control subjects who were not mailed the material and experimental group parents who were mailed the material showed no differences on measures of knowledge about effective parental strategies and self-reported parental mediation carried out during the experimental period.

Parent Intervention

The most essential element of preparing children to succeed in school has been identified as responsible parents and a health-nurturing home-life (Herrick, 1991; Moore 1990; Wikeland, 1990). Although most everyday interactions between parent and child are not explicitly instructional, children constantly seek the meaning, purpose, and connotation of everything around them (Rogoff, 1990). Studies in a variety of cultures reveal that adults spontaneously guide children's participation by building on the child's perspective and adjusting adult concepts to reach children's understanding (Rogoff, 1990). Vygotsky saw this type of social interaction as central to children's development and described intellectual development as a process of learning to use intellectual tools through social interaction. Through interaction and guidance provided by people who have achieved some skill, the child learns (Rogoff, 1990). Parents are prime sources of this guidance and are well positioned to guide their child's apprenticeship in thinking.

Similarly, parents are well positioned to guide and nurture their child's acquisition of skills as active, interpreting, selective television viewers.

The "zone of proximal development" describes children's developing abilities that lend themselves to enhancement through parental or adult interaction or apprenticeship. Social interaction and guided participation are central to enhancing those abilities in the zone of proximal development. Children's skills may build rapidly through routine "guided participation in ongoing cultural activities" as they (children) observe and participate with others (Rogoff, 1990, p.16). An effective method for facilitating the apprenticeship process is to respond to the child's point of focus and then engage the child in dialog relevant to their immediate point of interest. Studies have demonstrated that this approach leads to greater skill building than a didactic one (Rogoff, 1990).

Cognitive processes that occur initially on the social plane and then through interaction with others are eventually internalized. Shared thinking in "intersubjective communication" appears to be key to this process (Rogoff, 1990). Cultural activities become internalized after children have practiced thinking and problem-solving in a social context. Social interaction with a parent or older sibling enables the younger child to participate in skills she could not handle on her own. With exposure to this shared process the young child begins to internalize the interaction she had with more skilled individuals. Although children engage in this process through participation in cultural activities with the guidance of more skilled partners, Rogoff emphasized that children are active participants in this process.

Television viewing, which has traditionally been thought of as passive, does not connote the acquisition of skills. But the possibility of developing active viewing skills through a parent-child apprenticeship emerges when television viewing is conceptualized as involving active processes like selection and interpretation. The active child viewer selects and uses television for her own purposes (Shramm et al., 1961) and processes narratives according to her own preexisting cognitive structures drawn from her prior experiences (Collins, 1983). In addition, the active child viewer engages in the "intensely active process" of interpreting and re-interpreting verbal and visual televised texts (Hodge & Tripp, 1986, p. 7).

Through an apprenticeship process, parents and older siblings may scaffold younger children's ability to view television actively. This apprenticeship may be conceptualized to include three components, each of which is related to a theoretical approach:

(1) Children model parental behaviors like viewing selection and quantity. This behavioral modeling is described by social learning theory.

(2) Parents and children treat televised messages as social objects and interpret/reinterpret their meanings. This process of interpreting symbols and deriving meaning through this interpretative process is described by symbolic interactionism.

(3) Through social cognitive processes, children develop a theory of mind; they learn that they can infer what other people are thinking, feeling, intending, seeing, and what they are like as a person (Shantz, 1975).

Children's comprehension and interpretation of televised content is enhanced by interaction with adults (Buerkel-Rothfuss et al., 1982; Corder-Bolz, 1980). In general, encouraging parents to develop interaction with their children about televised content supports the idea that benefits of social interaction derive from shared thinking in intersubjective communication (Rogoff, 1990). But parents do not necessarily engage in this type of concept-enhancing dialog with their children (Desmond et al., 1985). They may never have observed this type of interaction with small children. Among low-income, African-American populations, one of the general barriers to parent involvement in children's learning has been identified as limited views of parental involvement (Moore, 1989).

For parents to carry out television mediation strategies requires not only that they gain specific knowledge but also that they transform that knowledge into action. The transformation of knowledge into appropriate action may be described by a model for self-efficacy (Bandura, 1986). People tend to avoid tasks and situations that they feel they are not capable of handling successfully (Bandura, 1977). Seeing oneself as capable actually increases one's participation in activities that help one become more competent. Conversely, seeing oneself as inadequate leads to avoidance of activities in which one could develop competencies (Bandura, 1986). Bandura cautions that despite a perception of being able to perform a task successfully, the individual must possess the subset of skills necessary for successful performance before success will be attained.

Perceived self-efficacy . . . contributes to the development of subskills, as well as draws upon them in fashioning new behavior patterns. (p. 395).

The mechanism for transforming knowledge to action first involves a process of verifying the validity of one's thoughts about what to do. There are several avenues by which this verification occurs, including: (a) comparing one's thoughts about what to do with one's actual experience, (b) watching what others do--this includes vicarious experiences like watching a video, and (c) listening to what experts say about what to do. The thought verification process refers to formulating beliefs. What people believe shapes and determines how they behave, how they think, and their emotional response to difficult situations (Bandura, 1986). Parents who believe that television programming is harmless are less likely to mediate their children's viewing than parents who see televised content as potentially harmful (Bybee, Robinson, & Turow, 1982).

Surveys of low income parents whose children were enrolled in Head Start revealed high levels of knowledge about appropriate viewing selections for preschool children and the desirability of regulating young children's viewing (Matthews, 1991, 1993). Lack of performance may not be due to lack of knowledge but due to a lack of resources (Bandura, 1986). For example, a study of family ecologies and television viewing revealed that in families with more family stress, young children viewed less "child informative" programming and in families with less child care, children watched more cartoons and other children's entertainment programming (Murphy et al., 1991). Although parents may feel that they know how to mediate their children's viewing, they may not choose to because of lack of incentives or a lack of resources like child care (Bandura, 1986).

No matter what a person believes about the action he or she should take, if the person does not have the subskills and resources necessary for successful performance he/she will not be successful (Bandura, 1986). Perhaps parents report that they favor regulation of their children's viewing and also report low levels of regulation because they actually lack some subskill or have not associated an existing subskill, the ability to interact verbally, with the type of parental mediation that has been demonstrated to be most effective (Desmond, et al., 1985). Lack of incentives and resources also may reduce performance (Bandura, 1986). Both of these deficiencies may be addressed through an educational process. Meanwhile, lack of resources like alternative stimulation, child care, secondary support, and high family stress (Murphy et al., 1991), which are side-effects of poverty, are deeply rooted problems that relate to United States society's structural issues and probably will not be ameliorated through educational interventions (Mills, 1959).

Rationale for an Intervention

Are parents' long-established parental mediation patterns and discipline styles the determinants of whether or not children can be educated by their parents about the medium? Can parents' mediation of their children's television viewing be influenced by training? If parents are provided with opportunities to enhance their self-efficacy concerning their ability to mediate their child's television viewing, will this exposure manifest an increase in their child's comprehension of televised content?

An attempt to investigate this possibility suggested an intervention in the form of a structured educational experience for parents. In the present

study, a workshop format was selected because Head Start parents are familiar with this method of receiving information. In addition, the workshop setting is conducive to incorporating elements of Bandura's self-efficacy model (e.g., the benefits of individuals observing each other's learning experiences).

The workshop was designed to include these components from Bandura's (1986) model for fostering self-efficacy.

(1) Vicarious experience via

(a) Viewing a video featuring a mother--whose demographics are highly concurrent with the majority of participating parents (i.e., single, low-income, African-American mother)--successfully mediating her children's viewing

(b) Observing other parents role-playing the behavior being learned

Self-efficacy appraisals are partly influenced by vicarious experiences. Seeing or visualizing other similar people perform successfully can raise self-percepts of efficacy in observers that they too possess the capabilities to master comparable activities (Bandura, 1986, p. 399).

(2) Verbal persuasion via

(a) Credible expert sources presenting information about the benefits to their child of mediating television viewing; i.e., researcher discussing developmental issues re: children and television

(b) Discussion from other parents

Social persuasion alone may be limited in its power to create enduring increase in self-efficacy, but it can contribute to successful performance if the heightened appraisal is within realistic bounds (Bandura, 1986, p. 400).

(3) Enactive opportunities like practice in mediation techniques via role-playing talking to their child about television commercials

Enactive attainments provide the most influential source of efficacy information because it is based on authentic mastery of experience (Bandura, 1986, p. 399).

The success of an intervention of this sort would imply that family mediation patterns may be modified to improve children's ability to understand the nature of television content. Parent training may increase parents' ability to convey their interpretations and their values vis-a-vis television content to their young children. These interactions could help their children become active viewers; i.e., able to treat television content as social objects to be interpreted and reinterpreted rather than as messages or sensations to be received passively. As discussed earlier, this active interpretation renders children less vulnerable to content that promotes values and behaviors that are objectionable to parents and ultimately to society (Desmond et al., 1985).

Only within a controlled experimental framework could the effectiveness of an intervention of this nature be adequately assessed. In light of this requirement and the previous discussion, the following research questions were warranted.

The Hypotheses

Survey and observational data confirm the relationship between parents' mediation of children's television viewing and children's comprehension of content. Parents and other significant adults may engage young children in an apprenticeship activity that helps to accelerate development of their various cognitive domains. Development is particularly accelerated when the skill or cognition involved is developmentally within the

child's grasp; i.e., in their zone of proximal development. Although television viewing is not generally considered a skill that must be taught to children, active viewing does require skill and knowledge. These skills and knowledge may be imparted to children through a parent-child interaction that takes advantage of several relevant learning processes.

Observational learning acts as a building block of this active viewing knowledge and skill. Children model parental viewing habits and interactions about television. In addition, the child learns that television messages can be treated like objects--social objects to be manipulated through a process of interpretation and re-interpretation. Through this interpretative process meanings are constructed and assigned. By parental example and with active parental mediation, children not only learn new ways to frame televised content but also learn to model an interpretive rather than a passive approach to televised content.

The parent also may take advantage of the child's developing social cognition when teaching active viewing to their child. For example, as the child learns that others have thoughts that may differ from his or her own, parents can point out television characters and the thoughts they express. Thus, theory of mind concepts may be advanced by parents who employ television as a source of social experience. Parents also may challenge the ideas conveyed on television and demonstrate to young children that the way things are presented on television are open to challenge. For example, parents may point out that a product shown on television is really not as good as it looks on television.

A practical test of the notion that parental mediation can increase children's knowledge and skill as active viewers requires choosing one area of television content to influence. In the case of this investigation, understanding of televised commercials has been chosen. This test also requires that the occurrence of parental mediation not be left to chance. Parents must be prepared for mediating and encouraged to engage in this activity with their child. To test the effectiveness of these circumstances the following hypotheses are advanced.

H1: On measures of children's abilities to distinguish commercials from programming, children whose parents attended the experimental workshop--i.e., received training and encouragement in mediating their children's television advertising viewing--will demonstrate significantly greater time 1 to time 2 increases on measures of children's ability to distinguish between programs and commercials than children whose parents attended the control workshop.

H2: Children whose parents attended the experimental workshop--i.e., received training and encouragement in mediating their children's television advertising viewing--will demonstrate significantly greater time 1 to time 2 increases on measures of children's ability to understand the intent of commercials than children whose parents attended the control workshop.

H3: Children whose parents attended the experimental workshop--i.e., received training and encouragement in mediating their children's television advertising viewing--will demonstrate significantly greater time 1 to time 2 increases on measures of children's ability to understand the deceptive

potential of commercials than children whose parents attended the control workshop.

Given the importance of parental mediation in advancing these hypotheses as well as evidence from earlier survey research linking parents with a discussion-oriented mediation style and a power-assertive discipline style with their children's high comprehension of television (Singer et al., 1988), the question must be asked--Will parent's preexisting tendencies to discuss and explain televised content to their children and to assertively regulate their children's television viewing interact with their training in television mediation? And will the effect of this interaction be evidenced by their children's larger pre- to posttest increases on the dependent variables? To answer this question, the following hypothesis was advanced.

H4: Children whose parents' are assessed (via self-report measures) as having a mediation style characterized a "descriptive" and a disciplinary style characterized as "power-assertive" will demonstrate a significantly greater increase in scores from time 1 and time 2 on the dependent variables than children whose parents have a "prescriptive" mediation style and a "love-withdrawal" disciplinary style.

In another related study, researchers found an interaction between parental mediation and the child's gender (Desmond et al., 1987). Authors of this earlier study found that television-specific mediation is more effective for boys than girls on measures of program comprehension, knowledge of commercials, and understanding commercials' persuasive intent. It is hypothesized that high parental mediation will interact with the child's

gender to demonstrate the highest television comprehension scores (among boys) for boys whose parents are frequent mediators. The previous research indicated that the same will not be true for girls. Based on this earlier finding the following hypothesis is advanced.

H5: Boys whose parents score high on a measure of descriptive mediation of television with their child will demonstrate significantly larger pre- to posttest increases in scores from time 1 to time 2 on measures of television advertising comprehension than girls whose parents score high on a measure of descriptive mediation.

CHAPTER 3 METHOD

Rationale for this Study

In the current study, an experiment was devised to investigate if low-income parents, with encouragement and training in mediation of their child's television viewing, could influence their preschool children's understanding of television advertising. The children in this study were approximately 5-years old and were enrolled in Head Start, an educational program which bases eligibility on low family income. Parental training occurred in special parent workshops. In addition to examining the effect of parental exposure to specific training on their children's subsequent television comprehension, the researcher explored the influences of individual parental mediation and disciplinary style differences on children's television comprehension.

The content targeted for parent mediation was advertising. This choice of television advertising was based on the practical need to narrow the focus of parent's mediation efforts for experimental purposes. Commercials were chosen because they are a discrete, distinctive content with an explicit purpose and less ambiguity than general programming content with its diverse formats and intended meanings (Wright, Huston, Reitz, Piemyat, 1994).

Evidence of parental concern about the negative effects of children's exposure to television content, the potential positive influence of parental mediation on children's television viewing, and the documented lack of that activity suggested the need to determine whether or not efforts to increase parental mediation of children's viewing could improve children's comprehension of television content. Although ethnographic methods employing naturalistic in-home observations to establish a baseline of parental mediation may be ideal, a less time- and resource-consuming method was desirable. The current study attempts an intervention approach. A parent workshop brought parents together to learn specific strategies for mediating their children's television viewing and specifically their children's understanding of television advertising. Parents received support to increase their knowledge and skills in mediating their preschool child's television viewing.

Subjects

The subjects for this study were drawn from a sample frame of students and their parents/caretakers enrolled in the Head Start program of Alachua County, Florida, during the 1993-1994 academic year. Alachua County, located in north central Florida, has a population of approximately 186,000. The county is made up of rural towns, unincorporated areas, and one metropolitan area which includes the city of Gainesville (population 85,587). Gainesville is the location of the University of Florida, a state university with an enrollment of approximately 35,000 students.

Head Start is a federally funded preschool program designated to serve low-income children between the ages of 4- and 5-years with pre-kindergarten education during the academic year prior to the child's entering kindergarten. Head Start classrooms may be located in both private and public schools. Teacher training, curricula, classroom logistics, supervision, classroom size, and parent involvement criteria are all regulated by federal guidelines and administered by local school boards.

Alachua County Head Start enrollees are drawn from low-income families. A screening committee places children in the program based on documented need. A high priority is given to single parents, children with special needs, those who have teenage parents, and those living in isolated areas of the county. Eligibility is based on the severity of financial need as determined by United States poverty and free/reduced lunch guidelines. Approximately 71% of the 739, 4-5 year old children in the program are of African descent, and the remaining 33% of students are of European, Hispanic, native American, and Asian descent. Approximately 77% of the children are from single-parent families.

Schools for this study were selected by the Alachua County Head Start director. Six of the classrooms, three per school, were located in two public elementary schools located in Gainesville. Two additional classrooms were located in the public elementary school for the town of Hawthorne, a rural community with an incorporated population of 1,366 located 16 miles east of Gainesville.

The potential participants of this study were comprised of 152 student-parent/caretakers combinations from eight Head Start classrooms from three Alachua County public elementary schools. The Head Start administration provided initial arrangements to use these three schools of their choosing. Of the total 152 student-parent/caretaker combinations from these eight Head Start classes, 45 participated fully in the study. In order to fully participate, parent/caretakers had to sign and return consent forms for their child to be pre- and posttested. The child had to be pre- and posttested, and the parent/caretaker had to attend a specially scheduled workshop at their child's school. In addition to the 45 students whose parents/caretakers did attend a workshop, 27 students for whom parental permission was obtained but whose parents did not attend a workshop were also pre- and posttested and formed a group of nonrandom controls; their responses were included with the responses of children whose parents did attend workshops in survey data gleaned from pre-test only results.

A total of 80 children were pretested. Of these, eight were eliminated from the study, four due to their difficulty in responding verbally during the pretest interview, three due to their lack of knowledge of English, and an additional child because a teaching assistant accompanied her in the testing room. This subject was the only student who was tested with a teaching assistant present. According to the interviewer, the teaching assistant's presence appeared to be a distraction.

Of the remaining 72 children who were pre- and posttested, 41 were female and 31 were male. Their mean age was 61.8 months (approximately 5

years of age) with a standard deviation of 4 months. Of the 45 children whose parent/caretakers participated in the workshops, 27 were female and 18 male. Of the parent/caretaker workshop participants there were 35 mothers, 3 fathers, 2 mother-father dyads, 3 grandmothers, 2 aunts, and one foster parent.

Design

Head Start parents/caretakers were introduced to information and techniques about mediating their children's television advertising viewing via parent workshops; i.e., the intervention. The difficulty of ascertaining differences in parental mediation before and after the workshops without naturalistic observation and without relying on parental self-report was overcome by measuring changes in children's cognitive skills regarding television advertising before and after the parent workshop. This measurement was accomplished through pre and posttesting/interviewing with the children about their understanding of television commercials.

Informed Consent

In order for Head Start students to participate in the study, parents had to sign and return an informed consent form. This consent form complied with the requirements of the University of Florida's Internal Review Board. Teachers were given forms to be sent home with children two weeks prior to the week targeted for interviewing. Two additional notices were sent home subsequently to remind parents to return the forms. Only children whose parents signed and returned the consent forms were allowed to participate in the study. Of the potential 152 students, forms were returned for 80.

Pretest/Intervention/Posttest Schedule

Children were pretested at their school. Children at each of the three schools were interviewed during respective two-week periods. Pretest interviewing of children at School A occurred between February 15 through 24. Parents of School A children attended a workshop at their child's school on February 26. During the third week after their parents attended the workshops, children from School A were posttested. Children from School B were interviewed from February 22 through March 3. Parents from School B attended the parent workshops on March 5. During the third week after their parents attended the workshops, children from School B were posttested.

After the completion of the workshops at School A and B, it was determined that the number of parent participants was not high enough to adequately carry out the intended statistical analyses for this investigation. Therefore, a third school (School C) with two Head Start classrooms was added to the study. This was a school located in Hawthorne, a rural community in Alachua County. Children at School C were pretested between March 28 and April 13. Parents attended the parent workshop on April 26. Children from School C were posttested during the third and fourth weeks subsequent to their parents attending the workshop.

Parents' Random Assignment

Parents who attended the workshops were assigned randomly to Experimental or Control workshops. As each parent entered the school where the workshops were being held, a research assistant referred to a table of random numbers from which a beginning number was chosen. From this

number, the research assistant proceeded vertically down the column. When the number was an even number, the parent was assigned to the experimental workshop; when it was an odd number, the parent was assigned to the control workshop. As the time approached for the workshops to begin, the research assistant made sure that the numbers of participants in each of the two workshops was even within three individuals. When the numbers of participants in each workshop appeared off by more than three, the random number assignment method was replaced by the method of assigning incoming parents alternately to each of the two workshops.

Independent Variables

Parents self-selected to attend the parent workshops. Several flyers were sent home to parents via their children encouraging the parents to attend the workshop. Many of the Head Start teachers spoke to parents on the phone and in person to encourage them to attend. Transportation, child care, and food were offered to facilitate attendance.

Approximately two to three weeks after the completion of pretesting at each of the three schools, two two-hour parent workshops, experimental and control, were scheduled on three respective dates. The workshops at School A and B were held on a Saturday mornings and at School C on a Tuesday evening. Times for the workshops were determined by informally polling some parents and teachers about preferred days and times.

Experimental Condition

Workshop leader. The experimental workshop was lead by an individual who was a full-time employee for Head Start and held the position of a

coordinator with responsibility for supervising several Head Start teachers. This individual frequently interacted with Head Start parents as part of her duties and contracted independently with the researcher to conduct these workshops. She was chosen on the basis of her experience in communicating with the target population. She received instruction from the researcher on the format and content of the experimental workshops.

In addition to the workshop leader, the experimental workshop was attended by the researcher who delivered information about research findings that related to strategies for parental mediation and helped emphasize the importance of parental meditation of children's television viewing.

The experimental workshop introduction. At the same time parents were assigned to a workshop by the research assistant, she gave them a group of questionnaires which were precoded with the parents' identification number. This number corresponded with their child's identification number. Then parents were instructed to enter the designated classroom. Workshop settings for both experimental and control workshops were Head Start classrooms, which are by design highly similar in size and layout.

A food buffet was provided for the parents in each workshop. The workshop leader pointed out the food and asked parents to work on their questionnaires as they entered the workshop classroom. The food was available as they filled out the questionnaires and throughout the workshop. Approximately one-half hour was allotted for the completion of the parent questionnaires. During the questionnaire time period, parents continued to

arrive and the workshop leader introduced herself and asked parents to introduce themselves.

Presentation of background information. The workshop leader began the program by giving basic background facts about children's television viewing. This information had been prepared in advance by the researcher and rehearsed by the workshop leader. The following script outlines the material covered by the workshop leader.

Do you worry about TV? Children watch almost 20,000 hours before the end of high school. What can parents do to protect their children from the violence and other bad influences of TV?

It's very important to be selective about what they watch, and it is important to put limits on their viewing--but let's face it, children will see things on TV that we wish they didn't--if not at your own house, at the homes of friends and relatives.

Good family communication works like a vaccination against what the things kids see on TV. Research shows that telling young children about television is the single best thing parents can do to protect their children from negative TV influences. That love and warmth, and the time you take to sit down and talk about what they have seen, protects them.

Telling your child your views about what is on TV is the inoculation which protects your child from harmful effects of TV.

Today we are here to learn just how we can talk to our young children about TV.

At this Head Start age they are just beginning to understand things which are very important to understanding just what TV is all about.

Developmental background presentation. *Denise will talk about why 4-5 years is such a good age for child to begin to understand what TV is all about -that it is not always real and that what you see on a TV commercial is not always what you get.*

The workshop leader then turned the presentation over to the researcher who presented information about the developmental appropriateness of talking to 5-year-old children (the average age of the Head Start children) about television advertising. The following is the script she used.

At four and a half, most children are just learning that what you see is not always what you get. In other words, up until four or five years children have a hard time believing that what they actually see with their eyes and hear with their ears can be different than what they see and hear, whether it's different to someone else who sees and hears it differently, or is different when its on television than in real life. Until they are around four and a half, it is hard for them to understand that the toy on television may look better on television than in real life. But now at this preschool age, they are beginning to understand that just because something looks one way to them it may not really be that way. For example, they see a three-colored yogurt on television. They want the yogurt. You buy them the yogurt. They hate it. They learn that it looks yummy but tastes bad to them. It looks one way but is another way.

Before the ages of four and five, most children cannot really understand that one thing can be two ways--look good and taste bad.

Also this is the age when they are beginning to understand that someone can intentionally fool them or that they can intentionally lie to someone else. They are just beginning to get the idea behind lying for a purpose. This idea is important for them to get before they can understand what television commercials are all about. It is hard for them to grasp that someone may try to make the toy seem better than it really is in order to make them want to buy it or have their parent buy it for them.

This is a complex idea for a pre-K child, but they are just on the edge of being able to understand. That is why we asked you to come here today--because they are ready to learn this idea. But they need help to learn and that help has to come from you at home.

Also, young children are often very frightened by things on television which they cannot understand; and if we don't talk to them about television, we may not know that they are very scared. Movies, adult movies, and horror movies are really bad for kids this age. Some adults report that they were terrified by movies like the Fly when they were little. Maybe you remember being scared by something you saw on television when you were real little.

One very interesting research study showed that kids whose parents received more than one movie channel did not do as well as other children on a test of their ability, and this was true even if the parents had a lot of education and money.

The researcher then turned the discussion back to the workshop leader.

Viewing the video. *Today we are going to learn how to talk to our kids about television--how to become active viewers and show kids how to be active viewers so they won't be harmed by television.*

Let's begin by watching this video made just for this workshop which gets into all of this.

Next, a seven minute video, "Family Views", was shown. The purpose of this video was to model parental mediation of television viewing. The family featured in the video was comprised of a mother, a 5-year-old male child with an 8-year-old female sibling and an 11-year-old male sibling. The video tape showed the whole family participating in choosing television programs they wanted to watch together by looking at a TV Guide. They then viewed a segment of televised violence which the mother and older siblings challenged as being an unrealistic portrayal of violence. Then they watched and commented on a toy commercial. The older siblings quizzed the 5-year old about the intent of the commercial. Then they watched a segment of "Reading Rainbow" together. The tape concluded with the family playing music together to portray family activities as an alternative to TV viewing, and a visual review of the major points made regarding mediating children's viewing (see Appendix A for "Family Views" video script).

Group discussion. Next, the workshop leader initiated a group discussion which followed this outline.

1. *Discuss value of limiting viewing time*
2. *Discuss value of being selective in choosing programming for child watch*

3. *Discuss importance of showing your child how to be an active viewer by*

a. *Explaining*

b. *Pointing out*

c. *Discussing what your child sees on television with them.*

The workshop leader emphasized that television can be used as a source of experience which you can talk to your child about.

She also emphasized the importance of teaching your child what a commercial is by (a) making sure that when a commercial comes on the child knows that the commercial is telling them to buy something (i.e., cereal, candy, or a toy); (b) pointing out how commercials make things look better than in real life; and (c) explaining why the people who make the product may want to make the product look better on television than in real life.

The workshop leader also emphasized that you can talk about television anytime, not just when you or your child is watching television. She also urged parents to contrast television violence with real violence--to continually teach their children the differences and to use examples from real life when they or someone around them was hurt or in pain.

Role-play activity. Next, the workshop leader introduced a group activity to the participants. Parents were shown two toy commercials. After each one they were asked to find a partner and to role play either being a parent or child, and then they were asked to switch roles with their partner.

The first commercial showed children playing with air guns. The situation posed in the role play was that the child wanted this gun and the

parent was charged with refusing to buy it by explaining why this was not a good toy, or a realistic portrayal of the toy.

The second commercial showed a young white female with white triplet dolls. In the role play parents were charged with pointing out that this toy would be too expensive for their family to purchase and would be a waste of money.

Parents were also encouraged to challenge values portrayed in both commercials if they did not agree with them. Parents were given time to rehearse their role plays and then were asked to repeat them for the group.

At the completion of the role play exercise, the workshop leader gave a "pep talk" to encourage parents to mediate their preschool child's viewing over the next two weeks. She also passed out "TV Diaries" and asked parents to write down daily entries of any interactions they had with their child about television during the two-week period.

Incentives. Incentives for participating in the workshop differed between the first two workshops and the third workshop. For the first two workshops, parent names were put into a bag and drawn for door prizes at the end of the workshop. Parents could also be eligible for an additional prize of a 100 dollar Sears gift certificate by submitting their "TV diary" at the end of the two week period. A drawing for the 100 dollar gift certificate occurred subsequent to the two week "parental mediation" period and a single participant's name was drawn to receive this prize.

Upon completing and handing in the questionnaire, participants of the third workshop were given five dollars in sealed envelopes marked with their

names. They were encouraged to return their "TV Diaries" in two weeks when they would receive an additional five dollars upon returning the diary.

Control Workshop

Workshop leaders. Procedures concerning the random assignment, questionnaires, and incentives were identical to the procedures followed in the experimental condition. The workshop leaders of the School A and School B Control Workshops were, like the Experimental workshop leader, full-time employees for Head Start who held positions as teaching coordinators with responsibility for supervising several Head Start teachers. The leader of the School C Control Workshop was not employed by Alachua County Head Start program and did not work regularly with this parent population. However, the School C leader had extensive experience conducting workshops for a wide range of professionals about issues related to children in Alachua County. Different leaders were used for each of the Control Workshops due to scheduling conflicts. All three Control Group Workshop leaders reported an enthusiastic response from participants, and no significant differences on children's posttest scores were found between the three Control groups.

Control workshop content. The content of the Control Workshops differed in content from that of the Experimental Workshops. Basic statistics and facts derived from the research on the effects of television viewing on children were presented. The emphasis was on acts of violence in television content, the type of research that has been done, observations of children's amount and type of viewing, public policy, and legal actions. Some recommendations were made about what parents can do. Talking to one's

child was mentioned but not emphasized (See Appendix B for background notes for Control Workshop).

At the conclusion of the presentation of basic facts, the workshop leader showed a video tape of short program segments including many violent acts depicted in children's programming. As these clips were shown, a discussion among the parents was generated. Parents were encouraged to discuss their experiences with violence in the television programs their children watched.

After viewing the violent programming clips, parents were asked to break into small groups (numbers depended on total number attending the workshop). Parents were then asked to look, as a group, at TV Guides which were provided and to create a four hour per week viewing schedule for a Head Start-aged child which was comprised of positive viewing selections and another weekly viewing schedule which was comprised of negative selections. Parents were given ten minutes to complete this exercise.

Upon completion of the exercise, participants from each group reported on their group's scheduling choices for both the "good" and "bad" schedules. Discussion generated by these reports was encouraged by the workshop leader. The completion of the Control workshops followed the same format as that of the Experimental workshops.

Parent Measures

For parents in both experimental and control groups, parental mediation was measured by a paper and pencil, parent-child interaction questionnaire (P-C Q). The P-C Q was self-administered by the 45 parent/caretaker/parent dyads who attended the Experimental and Control workshops during the

workshop. Another instrument to measure parental disciplinary orientation (PDO) was also self-administered by these parents during the workshop. In addition, a general questionnaire to ascertain parent and family demographics, aspects of media use, television mediation, and regulatory behavior were self-administered by parent/caretakers. Data from this questionnaire were not included as independent variables in the current analysis but will be reported on as survey data.

The P-C Q (Parent-child Interaction Questionnaire) (see Appendix C).

This instrument was developed in conjunction with The Yale University Family Research Center and as been used in previous studies including Desmond, Singer, Singer, Calam, and Colimore, 1985 and Singer, Singer, Desmond, Hirsch, and Nicol, 1988. The instrument consists of multiple descriptions of family situations. The current study used two situations describing family life in which parent-child interactions take place. One situation described a parent taking a child to visit relatives, the other situation described a parent responding to their child's viewing violence on television. For each situation, 5 forced-choice items offered possible parental responses to the situation. Parents were asked to check the choice which was closest to how they might respond to their child in the situation.

By analyzing the data gathered from 91 families, Desmond et al. (1985) concluded that the P-C Q yielded a bipolar factor for parental mediation style, description verses prescription. Parents who scored high on the discussion dimension indicated a preference for explaining, pointing things out, and allowing the child to participate in decisions; whereas parents who

scored high on the prescription dimension preferred using moral judgment and discipline .

P-C Q Instrument 1 posited the situation "Imagine that you are going on a visit to relatives with your child. Which of each of the pairs of things below are you more likely to do?" (see Appendix C, Part 1).

P-C Q Instrument 2 posited the situation "Imagine that you are watching a television program with your child which has turned out to be very violent" (see Appendix C, Part 2).

Parents were scored as either making a descriptive (discussion-oriented) response or a prescriptive (moralizing) type of response.

PDO (Parent Disciplinary Orientation) measure (for PDO instrument, see Appendix D). An earlier study by Singer and Singer (1981), in which a relationship between disciplinary styles and television viewing had been found, formed the basis for the development of this instrument by those authors and their associates. A situation was described; i.e., "If your child talks back to you what do you do?" Twelve possible disciplinary actions to the situation were listed. Parents were asked to respond as to how likely they were to take this disciplinary action: "never," "rarely," "sometimes," or "usually."

A value for parents' power-assertive disciplinary tendency was computed by calculating a mean score from three items. The items related to the question "If your child talks back to you what do you do?" Possible responses to the following alternatives of disciplinary action ranged from never = 1, rarely = 2, sometimes = 3, and usually = 4. The items were

1. Say you'll spank him/her if you ever hear talk like that again.
2. Spank him or her.
3. Make him/her stay home or take away a treat or privilege.

A value for parents' love-withdrawal tendency was computed by calculating the mean for 4 items. The items related to the question "If your child talks back to you what do you do?" Possible responses to the following alternatives of disciplinary action ranged from never = 1, rarely = 2, sometimes = 3, and usually = 4. The items were

1. Say you don't like children who don't show respect for their parents.
2. Don't say much, but he/she can tell your feelings are hurt.
3. Look angry and walk away without saying a word.
4. Give an angry look and ignore her/him for a while.

Earlier factor analysis by Singer and Singer (1981) and their associates had indicated two distinct patterns of response, one categorized as power-assertive and the other as love-withdrawal. Power-assertive discipline emphasized coercion and physical punishment while love-withdrawal emphasized parents withholding affection as a punitive response (Desmond et al., 1985).

Dependent Variables

Pre and Posttesting the Children

The dependent variables consisted of items assessing children's ability to discriminate between programming and commercial video segments, children's understanding of the intent of television advertising, and children's understanding of the deceptive potential of television items. Items designed to probe children's ability and comprehension in these areas were adopted and adapted from earlier studies. The instrument was administered to the

children at their school by interviewers during an approximately 15 minute pretest and posttest interview session with each individual child.

The interviewers. Three college student interviewers were selected to conduct the child interviews. Two interviewers were recruited from an undergraduate anthropology class and one from an undergraduate psychology class. They included two females, both with extensive experience with young children as mothers and in day care settings. The other interviewer was a male who had experience as a day care teacher's aid for a university on-campus day care facility. Two of the interviewers received independent study credit for their participation in the investigation, and one of the interviewers participated on a volunteer basis.

Training. The interviewers were trained in four sessions. During the initial session, the trainer showed the interviewers a video tape of herself interviewing a child of the target age and demographic background using the instrument developed for this study. The instrument was then distributed, and the interviewers were asked become familiar with the instrument.

The next three sessions were held at a public elementary school with children from a Head Start classroom not included in the experimental stage of this investigation. During each of the three sessions, each interviewer interviewed at least one child in front of the trainer and the other interviewers. During this training, interviewers were instructed to conduct the interviews as consistently as possible. Interviewer scripts were refined and through exposure to observing each other, an understanding of acceptable interviewing style and procedure was established.

At the end of each session the trainer and interviewers reviewed instrument items and revised the order of items and wording of items to make the instrument easier to administer to the preschool children.

The interviews. Prior to conducting the interviews, the interviewers visited each of the eight participating classrooms and were introduced by the teachers to the children. In many cases the interviewers had the opportunity to assist in the classroom and play with the children during their 10 to 30 minute visit. This preliminary introduction to the interviewers was conducted so that children would not consider the interviewers as strangers when they came to interview the children.

Prior to the interviews, children were assigned randomly to the three interviewers. The random assignment was conducted by picking a number from a random list of numbers and locating the child whose subject number corresponded with this random number. From this point on, children were assigned from master class lists to each of the three interviewers alternatively (e.g., the first child went to Interviewer 1, the second child to Interviewer 2, and so forth).

Interviews were conducted during a different two-week period at each school. In the three schools, the rooms used for the interviews included a small library reference rooms located in the school's media center, media supply and storage rooms, teacher office/work rooms, and an empty classroom. The interviewer set up a television monitor with a VCR and a video tape of the test stimuli before the child entered the room. A hand puppet, a translucent green gel, a white candle, five black and white pictures,

and a candy bar were also prepared for use in the testing situation. In addition, the interviewer set up an audio tape recorder to record the interview.

Each interviewer went to the child's classroom and asked the teacher for a child who had been randomly assigned to them. All teachers were familiar with the study and were prepared to allow children to go with the interviewer. The interviewer introduced her/himself and brought the child from their classroom to a private interview area where each child was interviewed in a room alone with the interviewer.

During the course of the interview the interviewer, played and stopped the video stimuli as necessary. At the end of the interview the child was returned to their classroom and another child was brought to the media center for testing unless the interviewer was finished for the day.

The Pre/Posttest Instrument (see Appendix E)

Distinguishing between programming and commercials. The method used to measure children's ability to distinguish commercials from programming was adapted from a method used by Levin, Petros, and Petrella (1982). These authors found that reliance on young children's verbal skills made it difficult to determine whether or not preschool children can make this distinction (Levin et al., 1982). In studies that relied on children's verbal articulation of the definition of a commercial, most children younger than 6-years old could not make this distinction (Robertson & Rossiter, 1974; Ward et al., 1977). Levin et al. (1982) found, however, that when 3-, 4- and 5-year old children were shown commercial and program segments on video and

asked to say whether each one was a "program" or a "commercial" the majority were able to make the correct distinction and their accuracy increased with age, even among the youngest subjects.

In the current investigation, during a one-on-one interview situation, each child was shown a series of 6, 12-38 second cuts of programming and commercials edited together as they would appear if one were grazing with a remote control through basic cable channels available in the Alachua County region on a Saturday morning. All the programming and commercials were selected from one continuous 3-hour time block (with the exception of a Headline News clip which was recorded from a later time block) and then edited together to simulate channel grazing on a Saturday morning. The interviewer said

Now we are going to watch some things on TV. I want you to tell me whether we are watching a program or a commercial. Remember, a commercial is when they are showing you something on TV that people can buy." (Note that the definition of a commercial was introduced only after all measurement of children's understanding of intent had been completed earlier in the interview.)

The following video clips were shown in this edited order: Barney program clip (38 seconds); Cocoa Puffs animated commercial (21 seconds); Wild Racers toy car commercial (12 seconds), CNN Headline news segment (20 seconds), toy tea set commercial (27 seconds), Garfield cartoon segment (29 seconds).

Once the child labeled the segment as a program or a commercial, they were asked to identify what the segment was about. Responses which correctly identified the segment as either commercial or program received a score of 1, and responses which were incorrect received a score of 0. Children were posttested using the same stimuli, 14 to 25 days after the initial interview.

Understanding intent of commercials. Children's understanding of the intent of commercials was measured by 4 items which required verbal responses including two open ended questions and two multiple choice questions with the choices being yes, no, maybe, and don't know. A measure which did not require a verbal response from the child was included at the end of the test.

The first item relating to understanding the intent of commercials posed by the interviewer was "Sometimes on TV you see a new toy or cereal or candy. Why do they show you these things on TV?" Responses which mentioned buying the product received a score of 2, and responses which mentioned getting attention or showing the product received a score of 1. Responses that were patently false or don't know, received a score of 0.

The second item which probed understanding of the intent of commercials was "What is a TV commercial? Do you know what it is? Do you know why they have TV commercials?" The answer to this question was also coded on a scale of 0-3. A response which mentioned "buying" received a score of 3, a response which mentioned being shown something or getting attention received a score of 2, a response which mentioned a commercial as

being something between programs received a score of 1, and any other response which was patently false or don't know received a score of 0.

In addition to these open-ended questions, children were asked two closed-response items. The first was *"Does a TV commercial show you something that someone could buy?"* Interviewers read children the possible responses of yes, no, maybe, and don't know. Response choices were counterbalanced from item to item to avoid response pattern bias. Responses of yes were scored as 2, responses of maybe were scored as 1, and responses of no or don't know were scored as 0.

The second closed-response question was: *"Are commercials trying to get you to buy something?"* Interviewers read children the possible responses of yes, no, maybe and don't know. Response choices were counterbalanced from item to item to avoid response pattern bias. Responses of yes were scored as 2, responses of maybe were scored as 1, and responses of no or don't know were scored as 0.

The inclusion of a multiple pictorial choice item to assess children's understanding of the intent of commercials was suggested by the research of M. C. Macklin (1987). The child was shown a 28 second commercial for a preschool-age game-toy "Crocodile Dentist." The child was asked to identify the product being advertised. Then the interviewer took out four individual black and white graphics each on an 8 1/2 by 11 inch piece of paper. These graphics had been reproduced from video frames depicting two scenes of a child in front of a television with the "Crocodile Dentist" commercial on the

screen and one of a child sitting on a couch with a thought balloon, and one of a child shopping in a store (see Appendix G). Two pictures showed a male child and two pictures showed a female child.

The interviewer said "Now I am going to show you some pictures" and allowed the child to help place the pictures on the table. The pictures were of the following situations: In each, the toy product from the previously shown commercial was prominently featured. The scenes showed

Female child watching TV with product on screen
 Male child with thought bubble above his or her head, with toy in bubble
 Male child at store with mother who is reaching for toy
 Female child playing with her back to TV. Product is on TV.

The interviewer asked the child what was going on in each picture and, once the interviewer felt the child knew what each picture represented, then asked "Can you show me which picture shows why the people who make the toy want you to see the toy on TV? As the child made a choice, the interviewer removed that picture and asked, "of the pictures that are left, which is the next best reason", etc. The choice of the shopping image received a score of 4 points, of thinking received a score of 3 points, of watching television received a score of 2 points, and of playing with back turned to the television set, a score of 1 point.

Understanding of deceptive potential. Five items were included to probe children's understanding of commercial's deceptive potential. In addition, children were shown a candy commercial and then shown the same candy in person. They were asked their opinion as to whether the candy looked better on television or in real life. Although this item is not part of the statistical analysis, this activity was seen as having the potential of priming children to see the discrepancy between the candy in the commercial and in real life.

Children were also primed by the following statement which the interviewer read to them prior to asking the following questions:

Sometimes the people who make the toys or cereal or candy that you see on TV try to make the toys or cereal or candy look better than they really are. Why do you think they sometimes try to make the candy or toys look better on TV than in real life?

Responses that mentioned selling or persuasive intent received a score of 2, responses that mentioned to pay attention/watch on TV/think about it received a score of 1, and incorrect or don't know responses received score of 0.

The following questions were asked in sequence. Note that the order of the response choices were counterbalanced to avoid a response pattern bias.

One child told me that the reason they sometimes try to make the candy or cereal or toys look better on TV than in real life is because "They don't know how to make it look the same on TV as in real life." Do you think that is right or wrong?

A response of wrong, received a score of 1 and right received a score of 0.

Another child told me that the reason they sometimes try to make the candy or cereal or toys look better on TV than in real life is so kids will ask their parents to buy them. Do think that's wrong or right?

A response of wrong received a score of 1 and right a score of 0.

Another child told me that they sometimes try to make candy or toys look better TV than in real life so that the kids on TV will have more fun. Do you think that is right or wrong?

A response of wrong, received a score of 1 and right received a score of 0.

Children were also asked, "Do you think the people who make the toy want it to look better on TV than in real life on purpose or do they make the toy look better on TV by accident?" A response of on purpose received a score of 2. A response of maybe on purpose received a score of 1. A response of by

accident or don't know received a score of 0. All of the test items described above were included in both the pre and posttest interview.

Appearance-reality pretest. A pretest-only measure of each child's ability to perform two appearance-reality distinction tasks was administered at the beginning of each pretest interview. The interviewer gave the child a brief appearance-reality training which was developed from procedures described by Flavell et. al. (1993). For details of how these items were administered see Appendix F.

Scoring

Interviewers were blind as to the children's parents' exposure to control or experimental workshop. Interviewers scored children's responses for the pre- and posttest, respectively, as they conducted the interviews. They also wrote down children's verbatim answers.

In preparation for analysis, an independent coder reviewed all of the responses written and scored by the interviewers for both pre- and posttests. Coder/Interviewer scoring agreement was very high, with the coder disagreeing with less than 1% of the total of the interviewers' scoring of written verbatim.

CHAPTER 4 RESULTS

Descriptive Statistics

The sample

Children. Pre and posttest response frequencies for seventy-two children, 41 females and 31 males, were obtained. Their mean age was 61.8 months (more than 5 years) with a standard deviation of 4 months. Children attended three elementary schools and were from different 8 classrooms. The number of children from each classroom ranged from 5 to 13.

Of the children who were pre and posttested, 45 had parents/caretakers who attended a workshop. There were 24 children with parents/caretakers in the Experimental Workshop and 21 children with parent/caretakers in the Control workshop. Of the 45 children whose parents participated in the workshops, 27 were female and 18 were male. Multiple analysis of variance for treatment and time main effects and interactions of treatment qualified by time were conducted on the pre/posttest responses for these 45 children. The 27 children whose parents did not participate in the workshops were pre and posttested but their responses were not included in the multivariate analyses of variance. The following data are provided to offer the fullest possible description of the participants.

Child demographics. The following data about these children were gathered from parent/caretaker responses to a self-administered questionnaire completed during the workshop. In cases where responses are missing, parent/caretakers did not provide an answer to that question on the questionnaire.

Of the 45 children whose parents attended the workshop, 18 (40%) lived in households with both parents and siblings, 15 (33%) lived with a single mother and siblings, 7 (16 %) lived with parents, grandparents and siblings, 2 (4%) lived with a grandparent or grandparents, and one lived with parents, grandparents, and other adults.

Parents' demographics. Of the 45 participating parent/caretakers, 34 (76%) were mothers, 3 fathers (7%), 2 mother-father dyads (4%), 3 (7%) were grandmothers (9%), 1 (2%) were foster parents and 2 (4%) were aunts. Of the mothers, 21 (60%) had attended college or graduated from college, and two of these mothers also attended graduate school. High school graduates among these mothers numbered 17 (50%) and 2 (6%) did not graduate from high school. No response was given by five parent/caretakers to this question about the child's mother's education. Even if it was assumed that in the cases in which no response was given mothers were not high school graduates, at least 85% of mothers in this sample graduated from high school.

Of the 38 responses to a question about father's education, 19 (50%) responded that the child's father attended and/or graduated from college. . Of these fathers, 3 also attended graduate school. Among the fathers, 14

(37%), graduated from high-school, and 5 (13%) did not graduate from high school. Assuming that in the cases in which no response was given to the question about father's education that the fathers had not graduated from high school, at least 51% of the fathers in this sample graduated from high school.

Of the parent/caretakers, 35 (71%) who responded to a question about who in the household works outside the home,¹ 10 (31%) indicated that the mother worked outside the home, 16 (50%) indicated that the father worked outside the home, 3 (9%) indicated that both parents worked outside the home, and 3 (9%) indicated that other adult relatives worked outside the home.

Of the 41 respondents to the question asking the family's first language, (91%) indicated that English was the family's first language. Spanish was given as the first language by one parent/caretaker. In one case a parent/caretaker indicated an unspecified "other" language and two gave no response.

On an open-ended question asking parents/caretakers "How would you describe yourself and your child in terms of ethnic/and or racial background?," 15 (33%) of parent/caretakers either did not respond or gave a response other than an indication of their racial/ethnic background (e.g., "we are not bigoted"). African-American, black, or Negro were responses given by

¹Given that parents/caretakers eligibility for Head Start is based on low-income, questions about employment may be sensitive and therefore may explain the low response rate to this question.

17(49%) of the respondents, white by 8 (18%) respondents, Hispanic by 4 (9%), and Native American by one (2 %) respondent.

Scale Properties

Child Measure Reliability Estimates

Child instrument items were grouped according to their measurement of one of the following three variables, each corresponding to a level of comprehension of television commercials, and each corresponding respectively to the first three hypotheses.

(a) Children's ability to distinguish between commercials and programming.

This ability was measured by six items asking children to distinguish between programming and commercial video segments (see Chapter 3 for description of instrument) and an additional question, "Is a commercial part of a program?" These items had a Cronbach's Standardized Item Alpha of .43 based on posttest scores of 72 subjects. This subscale was not used in the analysis because of the low reliability estimate.

(b) Children's ability to understand the intent of commercials.

Five questions measured children's understanding of the intent of commercials including

(1) "Sometimes on TV you see a new toy or cereal or candy. Why do you think they show you those things on TV?"

(2) "What is a commercial?"

(3) "Does a commercial show you something that someone could buy?"

(4) "Are commercials trying to get you to buy something?"

(5) "Which picture best shows why the people who make the toy want you to see it on TV?"

This grouping of items had a Cronbach's Standardized Item Alpha of .48 based on posttest scores of 72 subjects. The subscale, therefore, was not used in the analysis.

(c) Children's understanding of commercial's deceptive potential. Five questions measured this variable including

(1) "Why do you think they sometimes try to make the candy or toys look better on TV than in real life?"

(2) "One child told me that the reason they sometimes try to make the candy or cereal or toys look better on TV than in real life is because they don't know how to make it look the same on TV as in real life."

(3) "Another child told me that the reason they sometimes try to make the candy or cereal or toys look better on TV than in real life is so kids will ask their parents to buy them. Do you think that's wrong or right?"

(4) "Another child told me that they sometimes try to make candy or toys look better on TV than in real life so that the kids on TV will have more fun. Do you think that is right or wrong?"

(5) "Do you think the people who make the toy want it to look better on TV than in real life on purpose or do they make the toy look better on TV by accident?"

The grouping of the above items measuring children's understanding of the deceptive potential of television commercials had a Cronbach's Standardized Item Alpha of .30 based on posttest scores for 72 subjects. This subscale, as the others, was not used in the analysis because of its unreliable

nature. Since the internal consistency estimates were so low for each of the three subscales--commercial/program discrimination, understanding of intent, and understanding deceptive potential--scores for the items could not be summed. Instead, individual items were analyzed separately, resulting in single item measures for commercial/program discrimination, understanding intent, and understanding deceptive potential.

Parent Instrument Reliability Estimates

The fourth hypothesis predicted that parents with a descriptive mediation style and a power-assertive discipline style would have children who demonstrate a greater increase in time 1 and time 2 measures of their comprehension of television advertising than children of parents with a prescriptive mediation style and a love-withdrawing parental orientation style.

The Parent-child Questionnaire (P-C Q). This instrument determines parents' tendency to interact with their children in either a descriptive way, by discussing and explaining or in a prescriptive way, by moralizing and asserting authority. This instrument consists of two parts, each with five forced-choice questions. The structure of the forced-choice response requires the respondent to give either in a descriptive response or a prescriptive response. Scores were derived by summing descriptive responses to each of the 10 questions (from both 5 questions parts) and summing prescriptive responses. The sum of an individual's prescriptive score was subtracted from the sum of their descriptive score to determine their overall descriptive-prescriptive score. (For a more detailed description of this instrument and the scoring procedure please refer to Chapter 3.)

A Cronbach alpha of .80 was estimated for the P-C Q items. The number of descriptive and prescriptive parents in each treatment group and modes for their total number of descriptive or prescriptive responses are reported in Table 4-1.

Table 4-1. Parent-Child Questionnaire (P-C Q) respondents categorized as descriptive/prescriptive by treatment group.

| | Treatment Groups | | Mode of Total # of P or D Responses |
|---|--------------------------|---------------------|---|
| | Experimental (n = 24) | Control (n = 21) | |
| Descriptive (D) | 11 | 7 | 3 |
| Prescriptive (P) | 6 | 11 | 3 |
| Equal # of Descriptive/Prescriptive Responses | 7 | 3 | 0 |

Parental Discipline Orientation (PDO) instrument. This instrument consists of 12 questions, including three related to a "power-assertive" discipline style and four to "love-withdrawal" discipline style. For example, for the question "If your child talks back to you what do you do?", one of the power-assertive possibilities is "Spank him or her." Parents had four choices of responses to each question: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Usually. To obtain respondents overall power-assertive or love-withdrawal score, their responses to each choice associated with either power-assertive or love-withdrawal discipline orientation were summed. (For a more detailed description of this instrument and the scoring procedure please refer to Chapter 3.)

A mean of 2.59, and SD .12 were obtained for power-assertive responses. A median split was then made at a score of 3 to designate 49% of respondents as low power-assertive and 51.1% as high power-assertive.

A mean of 1.76 and SD .77 were obtained for love-withdrawal responses. A median split was then made at 1.50 with 47 % of respondents being designated as low love-withdrawal and 53 % as high love-withdrawal

A Cronbach alpha of .86 was estimated for the "power-assertive" discipline orientation and a Cronbach alpha of .65 was estimated for the "love-withdrawal" discipline orientation. Table 4-2 presents the means and standard deviations for the power-assertive and love-withdrawal PDO items.

Table 4-2. Parent Disciplinary Orientation

| | Mean | Standard Deviations |
|--|------|------------------------|
| <u>Power-Assertive Items</u> | | |
| Say you'll spank (Score *) | 2.64 | ± 1.15 |
| Spank him/her (Score *) | 2.13 | ± 1.06 |
| Take away treat (Score *) | 2.98 | ± 1.23 |
| <u>Love-Withdrawal Items</u> | | |
| Say you don't like children who don't show respect (Score *) | 2.13 | ± 1.21 |
| You won't talk unless child says sorry (Score *) | 1.82 | ± 1.19 |
| Look angry and walk away (Score *) | 1.51 | ± 1.56 |
| Ignore child (Score *) | 1.56 | ± .97 |

* Score 1 = never, 2 = rarely, 3 = sometimes, 4 = usually

Tests of the Hypotheses

The research hypotheses are summarized below. The findings that related to each hypothesis are reported.

H1: On measures of children's abilities to distinguish commercials from programming, children whose parents attended the experimental workshop--i.e., received training and encouragement in mediating their children's television advertising viewing--will demonstrate significantly greater time 1 to time 2 increases on measures of children's ability to distinguish between programs and commercials than children whose parents attended the control workshop.

Children's ability to discriminate between commercials and programming was analyzed as a function of treatment and time. On the 7 items related to this hypothesis, MANOVAs were conducted to determine main effects of treatment and time and an interaction effect of treatment qualified by time. Item-by-item MANOVAs revealed no main effects and no significant interactions between treatment and time for any of the 7 items related to Hypothesis 1 (see Table 4-3).

H2: Children whose parents attended the experimental workshop--i.e., received training and encouragement in mediating their children's television advertising viewing--will demonstrate significantly greater time 1 to time 2 increases on measures of children's ability to understand the intent of commercials than children whose parents attended the control workshop.

Children's understanding of the intent of commercials was analyzed as a function of treatment and time. On the 5 items related to this hypothesis, MANOVAs tested for main effects of treatment and time and for an interaction effect of treatment qualified by time. Item-by-item MANOVAs revealed significant interactions between treatment and time for two items related to Hypothesis 2. The MANOVAs for two open-ended questions probing children's understanding of the intent of commercials revealed that children whose

Table 4-3. Differences in ability to discriminate between commercials and programs for children whose parents participated in a workshop that did (n = 24) or did not (n = 21) present encouragement and training in parental mediation of children's TV viewing.

| Test Item | Discriminating Commercials and Programs | | | |
|--|---|--------------|--------------|--------------|
| | No Training | Training | No Training | Training |
| | Time 1 | | Time 2 | |
| Is a commercial part of a TV program? (Score *) | .38 ± .81 | .46 ± .78 | .48 ± .89 | .58 ± .93 |
| Is what you're seeing a commercial or a program? | | | | |
| Barney | .62 ± .50 | .79 ± .42 | .76 ± .44 | .79 ± .42 |
| Cocoa Puffs | .71 ± .46 | .83 ± .38 | .71 ± .44 | .79 ± .42 |
| Wild Racers | .67 ± .48 | .83 ± .32 | .76 ± .44 | .75 ± .44 |
| News | .48 ± .51 | .54 ± .51 | .43 ± .51 | .54 ± .51 |
| Tea Set Commercial | .76 ± .44 | .83 ± .38 | .81 ± .40 | .83 ± .38 |
| Garfield (Score †) | .38 ± .50 | .50 ± .51 | .38 ± .50 | .54 ± .51 |

Values are means ± SD

* Score ranged from 0 (know or don't know) to 2 (yes)

† Correct response = 1; incorrect = 0.

parents were in the experimental condition demonstrated significantly greater ability to identify the purpose and intent of commercials than children whose parents were in the control condition. The questions were

Why are new toys, cereals and candy shown on television?

The MANOVA revealed a main effect of the treatment ($p < .000$, F , 25.44, degrees of freedom [Df], 1), qualified by a time by treatment interaction, ($p < .05$, F , 3.94, Df, 1), thus providing partial support for Hypothesis 2. The time 1 and time 2 means for the two groups indicate a significantly greater increase for children whose parents were in the experimental workshop than for children whose parents were in the control workshop in the direction predicted by Hypothesis 2 (Table 4-4).

What is a commercial?

The MANOVA revealed a main effect of the treatment with ($p < .02$, F , 5.86, Df, 1) qualified by a time by treatment interaction ($p < .04$, F , 4.31, Df, 1) providing partial support for Hypothesis 2. The time 1 and time 2 means for the two groups indicate a significantly greater increase between scores of children whose parents were in the experimental workshop than for children whose parents were in the control workshop in the direction predicted by Hypothesis 2 (Table 4-4).

No main effects or interactions were found, however, for the two closed-ended questions or for the multiple choice, nonverbal measure related to understanding the intent of commercials.

H3: Children whose parents attended the experimental workshop--i.e., received training and encouragement in mediating their children's television advertising viewing--will demonstrate significantly greater time 1 to time 2 increases on measures of children's ability to understand the deceptive potential of commercials than children whose parents attended the control workshop.

Table 4-4. Differences in understanding intent of commercials between children whose parents participated in a workshop that did (n = 24) or did not (n = 21) present encouragement and training in parental mediation of children's TV viewing.

| Test Item | Measure of Understanding | | | |
|---|--------------------------|----------------|----------------|-----------------|
| | No Training | Training | No Training | Training |
| | Time 1 | | Time 2 | |
| Sometimes they show new toys, etc. on TV. Why? (Score*) | .29 ± .56 | .73 ± .88 | .43 ± .75 | 1.54‡ ± .72 |
| What is a commercial? (Score †) | .57 ± .87 | .67 ± .96 | .76 ± 1.04 | 1.75‡ ± 1.23 |
| Does a commercial show you something someone could buy? (Score **) | 1.71 ± .72 | 1.75 ± .68 | 1.81 ± .60 | 1.79 ± .59 |
| Are commercials trying to get you to buy something? (Score **) | 1.48 ± .81 | 1.33 ± .96 | 1.52 ± .87 | 1.71 ± .69 |
| Which picture best shows why the people who make the toy want you to see it on TV? (Score ††) | 2.77 ± 1.09 | 3.33 ± 1.05 | 3.10 ± 1.14 | 3.21 ± .93 |

Values are means ± SD

* Score ranged from 0 (don't know or nonsense) to 2 (mentioned buying)

† Score ranged from 0 (don't know or false) to 3 (mentioned buying)

** Score ranged from 0 (don't know/know) to 2 (yes)

†† Taking a rest = 1, fun watching = 2, thinking = 3, shopping = 4

‡ p < .05 for an interaction effect of condition qualified by time

Children's understanding of the deceptive potential of commercials was analyzed as a function of treatment and time. On the five items related to this hypothesis, MANOVAs tested for main effects of treatment and time and for an interaction effect of treatment qualified by time. Item-by-item MANOVAs revealed no main effects and no significant interactions between treatment and time for any of the 5 items related to Hypothesis 3 (see Table 4-5).

H4: Children whose parents' are assessed (via self-report measures) as having a mediation style characterized a "descriptive" and a disciplinary style characterized as "power-assertive" will demonstrate significantly greater increase in scores from time 1 and time 2 on the dependent variables than children whose parents have a "prescriptive" mediation style and a "love-withdrawal" disciplinary style.

An overall descriptive and prescriptive score was computed for each respondent. Prescriptive totals were subtracted from descriptive totals and two categories of respondents were formed from the difference scores. Of the total of 45 parent/caretakers, 10 received a difference score of 0. Because a score of 0 indicated that a parent was equally descriptive and prescriptive in their parent-child mediations, these parents were not included in the analysis. Respondents with a difference score of .01 through 8 were designated "descriptive" respondents; those with differences scores of -.01 and lower were designated "prescriptive" respondents. Eighteen parent/caretaker respondents received a difference score of .01 or above and were categorized as "descriptive" and 17 received a difference score of -.01 or below and were categorized as "prescriptive."

Respondents who were designated as descriptive and power-assertive were grouped together and labeled "PPP 1." People who were designated

Table 4-5. Differences in understanding deceptive potential of commercials between children whose parents participated in a workshop that did ($n = 24$) or did not ($n = 21$) present encouragement and training in parental mediation of children's TV viewing.

| Test Item | Measure of Understanding | | | |
|---|--------------------------|--------------|--------------|--------------|
| | No Training | Training | No Training | Training |
| | Time 1 | | Time 2 | |
| Why do you think they sometimes try to make the candy or toys look better on TV than in real life? (Score *) | .29 ± .72 | .54 ± .89 | .43 ± .81 | .54 ± .83 |
| Do you think the people who make the toy want to make it look better on TV on purpose or do they do it by accident? (Score †) | .57 ± .93 | .73 ± .98 | .48 ± .87 | .63 ± .92 |
| Sometimes they try to make toys, etc. look better on TV . . . because they don't know how to make it look like real life. Wrong or right? (Score ‡) | .57 ± .51 | .42 ± .50 | .52 ± .51 | .46 ± .51 |
| Sometimes they try to make the toys, etc. look better on TV so kids will ask their parents to buy them. Right or wrong? (Score ‡) | .71 ± .46 | .71 ± .46 | .52 ± .51 | .68 ± .48 |
| Sometimes they try to make the toys, etc. look better on TV so the kids on TV will have more fun. Wrong or right? (Score ‡) | .57 ± .51 | .58 ± .50 | .57 ± .50 | .42 ± .50 |

Values are means ± SD

* Nonsense/don't know = 0, mention to pay attention/watch/think about it = 1, mention selling/persuasive intent = 2

† Accident = 0, maybe on purpose = 1, on purpose = 2

‡ Incorrect answer = 0, correct answer = 1

prescriptive and love-withdrawal were grouped together and labeled "PPP 2." Twelve respondents fell into each group.

T-tests were computed to determine any significant differences (at the .05 level) between time 2 minus time 1 scores (gain scores) of PPP 1 (descriptive/power-assertive) respondents and PPP 2 (prescriptive/love-withdrawal) respondents on the all the dependent variables. Three significant comparisons resulted, one in the direction predicted by Hypothesis 4 and two in the opposite direction. A significant difference between children of descriptive/power-assertive parents (PPP 1) gain scores verses prescriptive/love-withdrawal parents (PPP 2) gain scores was found in the predicted direction for children's ability to distinguish Barney as a program verses a commercial ($p < .001$, $F 14.474$, $Df, 1$).

On two measures of children's understanding of the deceptive potential of commercials, contrary to the prediction of Hypothesis 4, children of PPP 2 parents had greater gains than children of PPP 1 parents. Means for these items are reported in Table 4-6. The questions corresponding to these items are in brief:

(1) *Do they make the toys on TV look better in real life so that the children on TV will have more fun?*

The T-test between PPP 1 and PPP 2 children's scores on this item revealed significant differences ($p < .001$, $F, 15.119$, $Df, 1$).

(2) *Do they make the toy look better on TV on purpose or by accident?*

The T-test between PPP 1 and PPP 2 children's scores on this item revealed significant differences ($p < .006$, $F, 9.175$, $Df, 1$). An examination of the means for these significant items revealed that for the items in which

Table 4-6. Means for gain scores (Time 1 - Time 2 differences) for items measuring children's comprehension of commercials which differed significantly for children whose parents are descriptive/power-assertive (PPP 1) and children whose parents are prescriptive/love-withdrawing (PPP 2).

| Test Item | Time 1 to Time 2 Gains in Measures of Understanding | | | |
|---|---|--------|-------|--------|
| | PPP 1 | | PPP 2 | |
| Is Barney a commercial? (Score *) | .17 | ± .58 | .00 | ± .00‡ |
| Sometimes they try to make toys, etc. look better on TV than real life. Right or wrong? (Score †) | - .23 | ± .60 | .00 | ± .00‡ |
| Do people who make toys want them to look better on TV on purpose or by accident? (Score †) | - .42 | ± 1.31 | .17 | ± .58‡ |

Values are means ± SD

* Scores ranged from 1 (correct) to 0 (incorrect)

† Scores ranged from 1 (correct) to 0 (incorrect)

‡ p < .05 for t-test of differences between PPP 1 and PPP 2 gains score

differences were opposite the direction predicted by Hypothesis 4, scores of children of PPP 1 parents actually dropped between time 1 and time 2 (Table 4-6).

H5: Boys whose parents score high on a measure of descriptive mediation of television with their child will demonstrate significantly greater increase in scores from time 1 to time 2 on measures of television advertising comprehension than girls whose parents score high on a measure of descriptive mediation.

Only 12 children in the treatment condition had parents who were categorized as descriptive power-assertive. Further breakdown by gender yielded groupings too small in number for further reliable analysis; i.e., seven females and five males. Therefore, the results of this analysis will not be reported.

CHAPTER 5 ANALYSIS AND CONCLUSIONS

This chapter will present a summary of the research problem. Findings and a discussion of the limitations and implications of this study will also be presented.

Research Problem and Findings Reviewed

The research question addressed in this investigation is whether or not the effect of training and encouraging parents to mediate their young children's television viewing would be demonstrated by increases in their children's comprehension of television commercials. The method chosen for assessing the effectiveness of parental mediation was to compare pre- and posttest comprehension of television content for children whose parents/caretakers participated in the experimental condition versus children whose parents were in a control condition. The television content targeted was advertising. A controlled experimental design employing random assignment was employed so that any differences between the responses of children whose parents were in the experimental condition and children whose parents were in the control condition could be attributed to differences in parents' workshop experience.

Hypothesis 1

Hypothesis 1 predicted that children whose parents who participated in the experimental workshop would demonstrate greater pre-to posttest

increases in scores than children whose parents participated in the control workshop. Children's ability to discriminate between commercials and programming was measured by asking them to respond to viewing six consecutive clips of video and indicating whether the clip was of a commercial or a program. Children also were asked a generic question about whether or not commercials are part of a program.

The percent of children from the entire sample ($n = 72$) able to discriminate commercials from program segments was relatively high, averaging 69% for the three commercials on the pretest and 78% on the posttest. For the Cocoa Puffs commercial, 53 children (74%) of the entire sample correctly identified Cocoa Puffs as a commercial on the pretest and 62 (86%) on the posttest. A commercial for toy cars known as "Wild Racers" was correctly identified as a commercial by 47 children (65%) on the pretest and 52 (72%) on the posttest. A commercial for a toy tea set was correctly identified as a commercial by 50 children (69%) on the pretest and 54 (75%) on the posttest. There were no significant differences in pre-posttest spreads either for the main effect of treatment or for an interaction effect of treatment qualified by time between children whose parents were in the experimental group and children whose parents were in the control group on any of these items.

With the exception of the "Barney" program segment, children demonstrated less ability to properly identify program segments as programs than to correctly identify commercials. For the entire ($n=72$) sample, there was no pre- and posttest difference in the number of children 52 (72%) who could correctly label Barney as a program. Pre/posttest ability to distinguish

the other two program clips as programs was lower. For the entire sample, only 43 (47%) of the children correctly labeled the news segment on the pretest and 32 (44%) on the posttest. Similarly for the Garfield segment, only 35 (49%) correctly identified Garfield as a program on the pretest and 50% on the posttest.

One additional item measured children's knowledge of the difference between programs and commercials. Children were asked if a commercial was part of a program. For the entire sample, pretest responses indicated that the majority of children did not recognize that commercials are not part of programs. When asked whether commercials were part of the program, the majority, 49 (68%) of children responded "yes", 3 (4%) maybe with only 18 (25%) giving the correct response, "no." Posttest responses were very similar with 50 (69%) responding "yes", 2 (2%) responding "maybe" and 20 (28%) giving the correct "no" response.

Implications. Levin et al. (1982) found that children as young 3 years of age correctly responded at levels above chance in distinguishing commercials from programs and that this ability increased with age. Among their 5 year old subjects, 80% correctly identified children's commercials and 74% adult commercials. Correct identification of programs was somewhat lower for the 5-year-old children, with 62% of them making correct identifications of programs. A comparison of the findings of the current investigation with those of Levin et al. (1982) revealed similar but lower results. Correct identification of programming for the current sample averaged 56% correct identifications for the three programs on the pretest, and 55% for the posttest.

The methods used in the current investigation were similar to testing methods used by Levin et al. (1982). In both studies children were shown short (10-38 second) program segments and commercials edited together. The Levin study, however, included 3 blank seconds between segments and exposed children to 21 segments (14 of programs and 7 of commercials), whereas children in the current investigation were presented with six, back-to-back segments (three of programs and three of commercials). Children in both studies were asked to verbally label segments as either programs or commercials. Levin et al. (1982) suggested that the correct identifications of programs may have been lower than for commercials because short segments of programs were shown and this is discrepant from the typical way programming is presented on television. The same explanation may be given for the lower percent of children correctly identifying programs versus commercials in the current investigation.

The lack of significant differences between treatment groups in pre- to posttest score spreads on these measures of children's ability to discriminate commercials from programs may be interpreted in terms of lack of parental encouragement and training to help children learn this distinction. Although the possibility of engaging children in a program/commercial discrimination game was mentioned in the workshop, no specific parental training to help parents develop their child's commercial/program discrimination skill was provided. Experimental group parents may have been unaware of the salience of developing this ability and therefore were not likely to engage their child in practicing program/commercial discrimination.

Hypothesis 2

Findings. As indicated in Chapter 4, significant differences between responses of children whose parents were in the experimental workshop and children whose parents were in the control workshop were found for two questions that related to children's understanding of the intent of commercials. These findings partially supported the prediction of Hypothesis 2 that children whose parents were in the experimental group would demonstrate significantly greater pretest to posttest increases on measures of their understanding the intent of commercials than children whose parents were in the control workshop. These significant differences were found for the two questions that elicited open-ended responses to questions probing children's ability to articulate the purpose of commercials.

The first question asked on both the pre- and posttest regarding the purpose of commercials was: *"Sometimes on TV you see a new toy or cereal or candy. Why do they show you those things on TV?"* On the pretest, of the entire sample, (n=72), a total of 11 children (15%) articulated a response indicating that the intention of the commercial message was to persuade people to buy the product (e.g., "cause they want you to buy them," "so you can go to the store and buy it," "to make you buy stuff"). Of the children whose parents were in the experimental workshop, 21% (5/24) on the pretest, versus 63% (15/24) on the posttest gave a response indicating that the intention of the commercial message was to persuade people to buy the product. For children whose parents were in the control workshop, 5% (n=1/21) on the pretest versus 10% (n=2/21) on the posttest gave a response

indicating that the intent of commercial message was to persuade people to buy. For children whose parents did not participate in either workshop, 19% ($n=5/27$) on the pretest versus 41% ($11/27$) on the posttest gave a response indicating the intent of commercials to persuade people to buy (see Figure 5-1). A MANOVA revealed a significant main effect for treatment and a significant interaction effect for treatment qualified by time for this item.

The second question asked about intent of commercials on both the pre- and posttest was: *"What is a TV commercial? Do you know what it is? Do you know why they have TV commercials?"* On the pretest, no child in the entire sample ($n=72$) articulated the intent of a commercial message. On the posttest, 63% ($n=15/24$) of the children whose parents participated in the experimental workshop articulated the intent of commercials in some form (e.g., "they make you buy stuff," "they want people to look at TV and get something," "so you can go to the store and buy it"). For children whose parents were in the control workshop, only 5% ($n=1/21$), articulated this understanding on the posttest, and among children whose parents attended neither workshop 11% ($n=3/27$) of the children articulated the intent of commercials in response to this question on the posttest (see Figure 5-2). A MANOVA revealed a significant main effect for condition and a significant interaction effect for treatment qualified by time.

Increases from pre- to posttest scores were not found for responses to the other three questions probing children's understanding of the intent of commercials:

Does a TV commercial show you something that someone could buy?

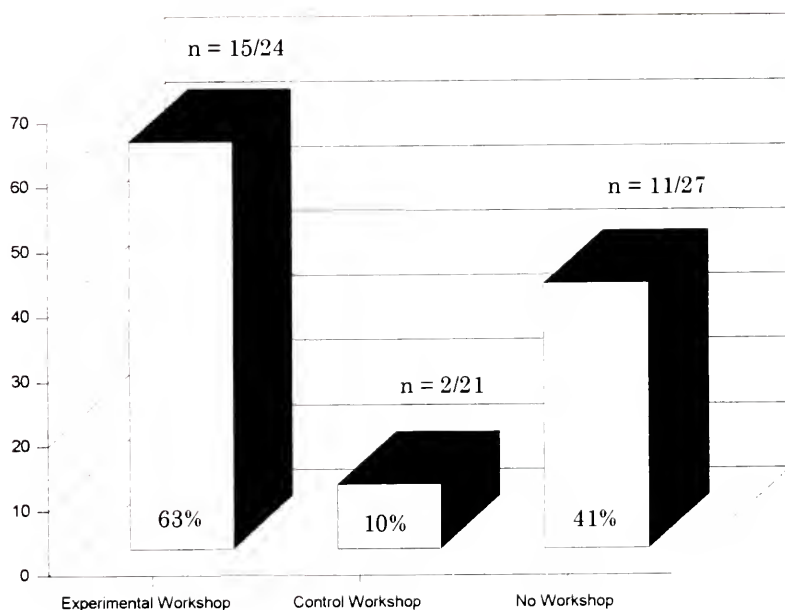


Figure 5-1. Posttest response to "Why do they show you those things (toys, etc.) on TV?" Percentage of children correctly articulating intent of commercial.

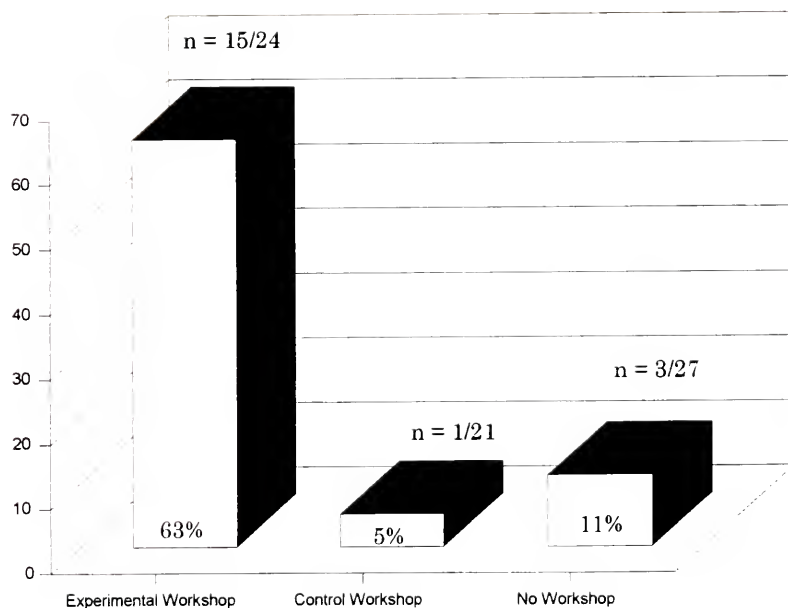


Figure 5-2. Posttest response to "What's a commercial?" Percentage of children correctly articulating intent of commercial.

Are commercials trying to get you to buy something?

Can you show me: Which picture shows why the people who make the toy want you to see the toy on TV?

These three questions tested children's *recognition* of the intent of commercials. Two of the questions were entirely verbal and a third allowed children to give nonverbal responses by choosing one of four pictures that illustrated possible reasons why products were shown on television (see Appendix G). Correct responses to these questions were high for the entire (n=72) sample on the pretest. In answering: "*Does a TV commercial show you something someone could buy?*", 61 (85%) percent of the children responded "yes" on the pretest and 64 (89%) "yes" on the posttest. And for "*Are commercials trying to get you to buy something?*", 51 (71%) of the children responded "yes" on the pretest and 53 (74%) on the posttest. Pretest results for the picture question also indicated a high proportion of correct responses, with 32 (44%) of the entire sample choosing the picture illustrating shopping for the product over the other 3 choices (Chi Square = Df, 2, F=50, [p. <.01]).

A MANOVA did not reveal significant differences in pre and posttest score spreads on the nonverbal response question for experimental and control groups. For the entire sample, 34 (47%) of the children chose "shopping" on the posttest, an increase of 3%, which is consistent with increases for the other two items measuring recognition of intent of commercials.

Implications. Although the majority of children were able to *recognize* the intent of commercials during the pretest, few children demonstrated the ability to *articulate* the intent or purpose of commercials. This finding is

similar to the results of earlier investigations suggesting that 5-year-old children do not generally understand the persuasive intent of commercials (Comstock and Paik, 1991). In a study using methods similar to those used in the current investigation, when researchers showed children commercials and asked them to respond to open-ended questions about the intent of commercials, only 3 of the 24, 5- to 6-year-old subjects demonstrated this ability (Blosser & Roberts, 1985).

In the current investigation, the relatively large pre- to posttest score increases for the children whose parent/caretakers were in the experimental workshop for the open-ended questions suggests that these parents did talk to their children about the intention of commercial messages to persuade viewers to buy the product advertised. These changes may be interpreted as evidence that the ability to articulate intention of commercials may have been only slightly beyond children's competence at the time of the pretest and that this ability was in many children's "zone of proximal development." Parents' interactions with their children about the intent of commercials may have provided a cognitive bridge from the child's ability simply to recognize the intent of commercial messages to the more complex ability, articulating that knowledge.

This interpretation is consistent with the proposal that a child's development occurs as the child participates in activities slightly beyond his or her competence and that the child is assisted in this development by more skilled individuals; i.e., an apprenticeship-type interaction occurs (Rogoff, 1990). The acquisition of this capacity to articulate intention via parental

mediation suggests that social learning occurred through the process of children modeling their parent's comments. In addition, a process of symbolic interaction is suggested, whereby parents and children interpreted commercials as "social objects" and manipulated them as social objects as they interpreted and re-interpreted the meanings of the commercial messages.

These results also suggest that social cognitive processes involved in children's developing theory of mind were operating. As children moved from recognition of the intent of commercials to the ability to articulate that intent, they came to apply their understanding that other people, like the people who make the toys or show the commercials, may have intentions and that intentionality can be assigned to representational entities, like the symbolic medium of television commercials.

Hypothesis 3

This hypothesis predicted that children whose parents were in the experimental workshop would demonstrate greater increases in their understanding of the deceptive potential of commercials from the pretest to the posttest than children of parents in the control workshop. However, this prediction was not borne out by the results. The majority of the sample, on both the pre- and the posttest, demonstrated low comprehension of the deceptive potential of commercials on four of five questions designed to measure this understanding. Within an introduction to the first question about deceptive potential, children were primed with background information that is necessary to understanding deceptive potential. With this priming,

interviewers established both the selling intent of commercial messages and the fact that advertisers try to make products look better on television than they are in real life.

(Child's name) did you know that the people who make the candy and the toys and cereal that you see on TV get money from grownups when the grownups buy these things at the store? And did you know that sometimes when they show you the candy or cereal or toy on TV they try to make the candy or cereal or toy look better in the TV commercial than it is really in real life?

Why do you think they sometimes try to make the candy or toys look better on TV than in real life.? (If child mentioned getting you to buy, selling something or anything indicating persuasive intent they received a score of 2, if they indicated anything about getting people to pay attention or watch the TV they received a score of 1, don't knows and false answers received a score of 0.

On the pretest, only 18 % (n=13) of all the children (n=72) mentioned either getting you to buy or some persuasive intent in response to this question. One child (1%) mentioned getting the viewer's attention and the remaining 81% of the children (n=58) gave a "don't know" or incorrect response. On the posttest 22% (16) children mentioned getting you to buy or persuasive intent, 7% (n=5) mentioned getting attention, and 71% gave a "don't know" or false answer. The MANOVA for this question did not reveal a significant main effect for treatment or a significant interaction effect for treatment qualified by time.

A third of the children indicated greater understanding in response to a question asked later in the interview

Do you think the people who make the toy want it to look better on TV than in real life on purpose or do they make the toy look better on TV by accident? (A response of "on purpose" received a score of 2, "maybe on purpose" a score of 1 and "by accident" or "don't know" a score of 0.)

On the pretest, of the entire sample ($n=72$), 24 (33%) of the children responded that the people made the toy look better on purpose. Posttest results for this question were almost identical, with 25 (35%) of the children responding "on purpose."

Three additional questions were asked as if they were a series of statements made by other children. Children were asked to indicate whether the other child's statement was right or wrong.

One child told me that the reason they make the toys look better on TV than in real life is because they don't know how to make it look the same on TV as in real life. Wrong or right?

Another child told me that the reason they sometimes try to make the candy or cereal or toys look better on TV than in real life is so kids will ask their parents to buy them. Right or Wrong?

Another child told me that they sometimes try to make the candy or toys or look better on TV than in real life so that the kids on TV will have more fun. Wrong or Right?

On the pre- and posttest, children's responses were close to chance, with 49% on the pretest giving the correct response, "wrong," to "they don't know how" to make the toy etc. look the same on TV and 47% responding "wrong" on the posttest. To "they want the kids on TV to have more fun," 47% of the children gave the correct response, "wrong," on the pretest, and 41% answered correctly on the posttest. For the correct statement, "so kids will ask their parents," 67% of the children answered correctly on the pretest, and 68% answered correctly on the posttest. No significant main effect for treatment or interaction effect for treatment qualified by time was found.

Implications. Children demonstrated low pretest and posttest understanding of the deceptive potential of commercial messages. Based on

previous research, a viable explanation for the failure of this hypothesis may be that the ability to understand the deceptive potential of advertising is beyond the developmental capacity of 5-year-old children. This conclusion is consistent with previous research findings indicating that before the age of 8, most children did not grasp that commercial messages may be intentionally deceptive (Robertson and Rossiter, 1974).

Failure to understand this deceptive potential relates to children's theory of mind development. Although some evidence has been presented that children's rudimentary understanding of deception may emerge as early as 21/2 years (Chandler & Hala, 1989), several prerequisite abilities must be acquired before children can understand fully that others may be deceiving them (Chandler, 1991; Wimmer & Perner, 1983). In the case of commercials, children must be able not only to assess intentionality of the other, as in real life deception, but children also must apply this understanding to symbolic representations. A further challenge is that commercial messages are constructed to conceal deception. Children, like adults, depend on facial and nonverbal cues to detect deception in another person (DePaulo et al., 1985), but in the case of commercials, any cues to deception in the message are masterfully disguised.

An expansion of this explanation is found in the results of the Paget et al. (1984) study, which looked at children's capacity for recursive thought.

These authors explain that the understanding of the persuasive intent of commercials is an example of 2-loop recursive thinking. The television viewer must be able to think about the advertiser thinking about how to

manipulate the viewer into thinking a particular way that leads to buying the product. Their study demonstrated that children between 5 and 8 years of age develop in their ability to engage in 1-loop recursive thinking (e.g., thinking about what the advertiser is thinking), which is the type of process involved in realizing that the people who make the toy "want to get you to buy." However, development of 2-loop recursive thinking, according to these authors, is a "decidedly protracted affair" (Paget et al., p. 156) that continues well into adolescence. The capacity for 2-loop recursive thinking allows the child to understand that they can think about the advertiser's thinking, but also that they can think about the advertiser's thinking about their own (the child's) thoughts. For example, it takes 2-loop recursive thinking to understand that the advertiser implies a loss of popularity if the child doesn't have the toy in order to manipulate the child into wanting to buy. If 2-loop recursive thinking is a challenge for grade-school children, it seems unlikely that preschool children, even with parental scaffolding taking place could make this developmental leap. Understanding deceptive potential does not seem to be in the 5-year-old child's "zone of proximal development."

Although it is plausible that the failure of this hypothesis may be because the skill is beyond the developmental capacity of the 5-year-old child, an alternative explanation must be put forth. It is not possible to determine whether or not parents who participated in the experimental workshop actually attempted to educate their child about the deceptive potential of commercials. They were instructed to do so and practiced ways of verbally conveying that information to their child in the workshop. Posttest results, however, show very little change in children's understanding of this concept.

Explanations for this result must include that parents did not mediate to increase their children's understanding of the deceptive potential of commercials.

Hypothesis 4

This hypothesis was based on findings from an earlier study (Desmond et al., 1985) and predicted that children's gains in understanding of commercials would be predicted by parents' mediation style and disciplinary orientation. A combination of descriptive parental mediation style and power-assertive disciplinary orientation had been associated with children's comprehension of commercials in the earlier study. Therefore, it was predicted that children of descriptive/power assertive parents would have higher gain scores on the dependent measures than children of prescriptive/love-withdrawing parents. In the current investigation, however, children of parents who were categorized as descriptive in mediation style and as having a power assertive orientation had higher gain scores than children of parents with a prescriptive mediation style and love-withdrawing disciplinary orientation on only one dependent measure, discrimination of "Barney" as a program versus a commercial. Children of descriptive/power-assertive parents (PPP 1) actually had significantly lower gain scores than children of prescriptive/love-withdrawing parents (PPP 2) for two questions measuring understanding of deceptive potential.

The failure of these self-reported parental measures to interact with children's comprehension as predicted may be due to several factors. First, in the Desmond et al. (1985) study, the authors used many more situations than the two used in the current investigation for the P-C Q. In the current

investigation, 10 parents whose responses to the P-C Q indicated an equal tendency for both descriptive and prescriptive mediation styles were not included in the analysis. More measures of this dimension may have indicated a more distinct parenting style for these parents. Larger numbers of parents categorized in the two dimensions would have provided more opportunity for the statistical analysis to reveal differences between children of the two types of parents on dependent measures.

Difficulties with attempts to use family characteristics to explain children's behavior and predict changes in that behavior were noted by Ward et al.(1977) in their discussion of family socialization research. Their observation that global parental style variables often had failed to explain differences in children's behaviors in past research led them to adopt a situational approach that looks at parents' influence on children in terms of specific situations rather than in terms of global parental traits.

Hypothesis 5

This hypothesis predicted that boys of descriptive parents in the experimental group would show greater gains in understanding than girls. The low numbers of children in the groups being analyzed precluded any analysis of this hypothesis.

Limitations of this Investigation

Lack of Parental Mediation Observation

The design of this investigation did not include observation of parental mediation. Therefore, it only can be inferred that differences in children's pre-posttest comprehension are due to differences in parents' workshop

experiences and subsequent behavior with their children. The validity of this inference depends entirely on the adequacy of the research design and methods that were employed. The construction and parallel (in time and method) administration of two treatments that varied only in specific content, accompanied by random assignment of self-selected parents from a sample pre-screened for income homogeneity, assured comparability of the two groups along all dimensions save those of the experimental manipulation.

Low Reliability of Child Measure Subscales

When items measuring the same type of comprehension of commercials by children were grouped as subscales, tests for the reliability of these subscales resulted in unacceptably low reliability coefficients. It may be argued, however, that among developmental psychologists who routinely test young children, there are few expectations that young children will respond consistently. Researchers with this orientation may see the abandonment of these subgroupings as a limitation and may recommend that re-analysis be conducted using score totals for the original item subgroups.

Elimination of Parents from the Parental Mediation/Disciplinary Orientation Analysis

The decision to eliminate parents from the analysis involving parental mediation style and parent disciplinary orientation who did not fall into the predesignated categories may be viewed as a limitation. Elimination of these individuals restricted the amount of information that could be gathered from analysis of the interaction of these parent variables with children's comprehension of commercials. The expansion of categories to include

descriptive/love-withdrawing parents and prescriptive/power-assertive parents also may yield informative results.

Conclusions

Several conclusions may be drawn from this investigation. The significantly greater ability of children of experimental group parents to articulate the persuasive intent of commercials strongly suggests a causal relationship. It appears that by encouraging and training parents in appropriate mediation skills can help them enhance their children's understanding. However, this success appears to be dependent on several factors. One major factor seems to be whether or not the child's ability is within his accessible repertoire of competence; i.e., his zone of proximal development. This conclusion is supported by the evidence that children whose parents were in the experimental workshop did no better on understanding deceptive potential than the other children on the posttest.

Children's capacity to understand the deceptive potential of commercials appeared low both on pre- and posttest measures. Developmental literature, as well as previous investigations about children's understanding of commercials, indicates that most 5-year-old children do not grasp the idea that commercial messages may be constructed to deceive them. This ability is outside their zone of proximal development.

The general conclusion put forth above is somewhat challenged, however, by the failure of the intervention to lead to any elevation in children's ability to discriminate commercials. To some extent, a ceiling effect may have been revealed, with children performing in the

approximately 70% to 80% range on pretest measures for identifying commercials (Cocoa Puffs, Wild Racers, Tea Set). However, their ability to identify programs was low, with the exception of Barney. Their correct identification of both the news programming and Garfield were in the range of chance guessing.

Although children's capacity to discriminate programs from commercials appears to be in their zone of proximal development, children whose parents were in the experimental workshop did not improve. One explanation for this failure may be that, unlike teaching the intent of commercials, parents were not given opportunities to practice teaching this discrimination task in the workshop. Also, teaching children to see the difference between commercials and programs most likely must be done while coviewing with the child, whereas teaching children the intent of commercials could have taken place in situations other than during coviewing.

Public Policy Implications and a Call for Media Literacy

The First Amendment ensures that the United States population must tolerate a broad spectrum of public communication. This constitutionally supported tolerance inhibits regulation of television content, including content like the persuasive messages of commercials that are targeted for young children. Child advocates have expressed frustration with this limitation, particularly in regard to children and television advertising. Nations like Canada, Britain, and Australia that do not have the same safeguards on freedom of speech regulate the quality and quantity of

children's programming as well as the commercialization of that programming.

An alternative to industry-wide regulation that has been promoted over the decades in the United States is parental regulation and mediation of their children's viewing. As earlier survey studies and the current investigation suggest, parents can be effective mediators of their children's comprehension of television fare. However, surveys also have indicated that while parents advocate regulation and mediation of their children's television viewing, they simultaneously report that they mediate infrequently.

The implications of this investigation are that low-income parents may be encouraged and trained to mediate their young children's television viewing successfully when parents target competencies in their child's zone of proximal development. While parent workshops may be an ideal setting for encouraging and training parents in this activity, many parents are unable to spare the time and resources (e.g., child care) to attend this type of special program.

The effectiveness of providing training for parents in mediating their children's television viewing implied by the current investigation, coupled with a United States public policy that emphasizes parental responsibility for protecting children from television's negative effects, suggests the need for public support to increase media literacy. One appropriate forum for supporting universal media literacy for the United States population is through inclusion of media literacy in the public school curricula, from pre-school through high school.

Universal media literacy may be regarded as parallel in importance to reading literacy because most adults and children now receive the majority of their information and cultural experience from viewing television. The skills necessary to interpret written text are analogous to the critical skills taught in media literacy curricula (e.g., the skills to analyze messages, determine the point of view and identify the sources and intended meanings of messages). Although these skills traditionally are associated with the written medium, teachers of language arts and other subject areas increasingly are teaching students to apply critical skills to television and other audio-visual media. Currently, these educational activities are not systematic and depend on the interests of a particular teacher, principal or school board. Widespread media literacy is not yet the norm in the United States.

The current investigation underscores the potential value of introducing media literacy into the public school curricula. Young parents who have been taught media literacy skills are more likely to be active television viewers. They will model active viewing for their children and be prepared to apprentice their children to become active viewers. In addition, if media literacy is properly introduced into the curricula from the child's earliest public school experience, that child will be better prepared to interpret the symbolic messages of television as their cognitive capacities develop.

Suggestions for Further Investigation

Evidence that parents were successful in scaffolding their young child's comprehension of the intent of television commercials suggests that this understanding is in the child's "zone of proximal development." Further investigations may be conducted with older children (e.g., 8 years of age) to determine if children may be similarly apprenticed in understanding the deceptive potential of commercials by parents who have been encouraged and trained in mediating their child's viewing of television commercials.

A need for further conceptual work also is indicated.

Reconceptualization of television viewing as cultural activity worthy of parent-child apprenticeship empowers parents and educators to develop approaches to helping children exploit television for their own development. In addition, this reconceptualization offers researchers of media effects and children an opportunity to explore the potential for expanding parent-child interactions about television to include developmentally appropriate apprenticeship activities.

APPENDIX A
VIDEO SCRIPT

FAMILY VIEWS

| VIDEO | AUDIO |
|--|---|
| FADE UP | |
| YVETTE On CAMERA INTERVIEW | YVETTE: I let W. watch between 1, tops 2 hours a day. That's it. |
| CUTAWAY Shots of W. and his two older siblings in the living room. The TV is off. | That includes the time he watches with me or his older brother or sister-- |
| YVETTE enters the living room-- | Each of the kids can watch no more than 1 or 2 programs on a weekday and 2 hours a day on the weekend |
| The look over the TV GUIDE | The biggest thing I can do for my kids where TV is concerned is to limit the time they spend watching and help them choose what to watch. |
| | NAT SOUND: YVETTE and the kids interact about what they will watch that day. |
| SHOTS of children looking at TV guide with YVETTE | YVETTE (V/O). Sure it takes a little of my time--but it's worth it. |

VIDEO

B & W child at chalk board
 pushing book away
 temper tantrum
 TV GUIDE

YVETTE turns on the TV

Yvette and Walade watching
 intercut shots of show

YVETTE on CAMERA

Violence

Y and W interacting

YVETTE AND WALADE TWO
 SHOT

WALADE

YVETTE

AUDIO

For example--the research shows that kids who watch a lot of TV do worse in school, and they don't read as well, and the research even shows that kids who watch a lot of violent shows like cop shows have more behavior problems when they are young and are more violent when they grow up--so believe me, it's worth it to let them watch no more than one or two hours of selected TV a day.

YVETTE:

Okay, let's see what happens today.

YVETTE: (V/O)

When W.'s watching something other than a preschool type show--Barney or Sesame--that's when I make sure I'm watching with him--He's too young to watch lots of shows--on his own.

At 4 and 5, there's a lot that they just do not understand--As a rule I don't let W. watch any violent shows--but more often than I like there is some violence even in the shows I do let him watch--after all--there are hundreds of violent acts on TV everyday.

Whenever he sees violence--I explain how unrealistic it is.

YVETTE:

Do you think those rocks will kill the man, Walade?

WALADE:

No, he'll get up.

YVETTE:

But is that for real?

| VIDEO | AUDIO |
|--|---|
| IRIS | IRIS: No--in real life he would be dead. |
| OSHE | OSHE: See how fake--no, the guy is coming out of the pile or rocks alive. That's fake--right Walade? |
| WALADE | WALADE: Right |
| YVETTE | YVETTE: That's only on TV--not for real. |
| KIDS WATCHING | YVETTE V/O If you let them watch without talking to them about it--the results can be very harmful. |
| Headlines | Kids will imitate the violence--Kids who watch a lot of cop-type shows hit other kids more in the playground. |
| WS of playground | |
| CUT TO COMMERCIAL | YVETTE V/O Cont. My older kids and I always try to point out to W. here comes the commercial. Then we make a game out of--what are they selling. |
| Commercial | OSHE: What's that Walade? |
| Walade's face | WALADE: A commercial. OSHE: What do they want us to buy? WALADE: That toy. IRIS: Biker Mice--I've seen kids at school with those--they don't look very big or tough in real life |
| Intercut children interacting and commercial | |

VIDEO

AUDIO

Intercut for Dialogue

OSHE:

Yeah--they just take the camera and put it up real close. Close up it will look big, and then they put all that loud music, and the guy talks in that real tough voice. "Biker Mice"--it's fake.

YVETTE: (V/O)

And of course, they have to learn that they may not be getting the whole truth about the products.

YVETTE:

Okay--that show is over. Let's turn on Public TV--Reading Rainbow

SEGMENT FROM READING
RAINBOW

Ghost Writers

YVETTE V/O: Not everything on TV is bad--Public TV has a lot of good shows for kids. When my kids are watching a show which has some values in it, I agree with--that I want him to learn--I like to point that out to them--Sort of underline the what is good about the way the children do on the show.

YVETTE:

Hey. Do you see how they use they are learning to write so they can get some results?

CUT TO YVETTE on CAMERA

YVETTE:

And you know what young kids really don't understand is the news--seeing real violence on the news is very frightening to young children, and the news is something they have a hard time understanding--I don't let W. watch the news--even when with me.

NEWS open

YVETTE and Kids get up and leave
frame

VIDEO

AUDIO

FADE WHITE

FADE UP ON

She's setting up to do music

Jam session

YVETTE:

You know sometimes the hardest part is practicing what I preach.

At the end of a hard day, I like to veg out in front of the tube--but if I spend a lot of time doing that, the kids will end up watching a lot of TV, too.

Instead of watching--I try to do things that relax me and I enjoy--My first love is music. I sing and play in the evenings--my kids are doing their homework--or their own thing or maybe they join in--

Funny how it makes us feel a whole lot better than a night in front of the TV set.

MUSIC

FADE BLACK
UP ON

Review

Character generator over related shots

YVETTE:

So, these are the most important things you can do to make sure TV does your kid no harm.

1. Limit amount of time they can watch.
2. Select what they will watch.
3. Explain the difference between the violence on TV and real life--that in real life the violence hurts and people die.
4. Point out when the program ends and the commercial begins so they can learn the difference.
5. Start teaching them what commercials are actually trying to do--make you buy something and that what they see in a commercial is not necessarily what they get.

FADE BLACK

APPENDIX B
CONTROL CONDITION--BACKGROUND NOTES

Part 1--Violence in the Media

Facts and Figures

The following information is based on a study by the Center for Media and Public Affairs. They observed 18 hours of TV in one day period from 6 a.m. to midnight on 10 Channels in DC area: ABC, NBC, CBS, PBS, Independent Station, WTBS, USA, MTV, and HBO. Total of 180 hours observed.

Defined violence as:

Any deliberate act involving physical force or use of weapon in an attempt to achieve a goal, further a cause, stop an action of another, act out angry impulse, defend oneself from attack, secure material reward, or intimidate others.

They observed 1,846 such acts of violence including 362 scenes of gunplay, 673 scenes of punching, pushing, slapping, dragging.

Cartoons most violent--with 471 scenes. Promos for TV shows next most violent with 265 incidents of violence. Toy commercials, 188 acts of violence followed by MTV and ads for theatrical films.

Stations in order of number of violent scenes:

HBO
USA
MTV
FOX
CBS
ABC
NBC
PBS

Study concluded that violence remains a major feature of TV and comes from more programming sources than ever.

How much TV do kids watch? Average--about 2 to 3 hours a day, 20,000 hours by age 18.

How bad is TV violence for our kids? Common sense tells us that TV violence is bad for kids--but what does the research say?

A. Research done in laboratory settings--experiments

When kids see violence they imitate it under some conditions--e.g., when the person who does the violence is rewarded.

Seeing violence may also instigate violent or aggressive behaviors rather than distinct imitation of what they have seen.

B. Observational Studies

Children who are observed to behave most aggressively in preschool setting were those who watched the most action-adventure--adult-oriented programming.

C. Longitudinal Survey

Leonard Eron's 20-year longitudinal study involving 800 8-year olds through the age of 30--TV violence viewing correlated more highly with how aggressive subjects became at age 19 than any other predictor including IQ SES parental attitudes.

These correlations held up with different sexes, age levels, locations, and measures of aggression--Conclusion, regular viewing of violence positively influences aggressive behavior.

A third variable, like SES and school performance, did not eliminate out as an explanation for the correlation between aggressive behavior later in life and high TV aggression TV diet as youngster.

These studies asked what is the effect of TV violence on behavior--but a larger question is

How does the continual flow of violence in the media affect our beliefs, attitudes, and values and the quality of life in our country?

Much of the early research came from the 1971 Surgeon General's Scientific Advisory Committee on TV and Social Behavior Report--called TV and Growing UP. The Impact of Televised Violence.

More recent research done by Daniel Anderson at UMASS--he observed 99 families for 10 days using videotape, and he analyzed 5,000 hours of videotape. What he found was

Children watch actively--they talk about what they see and hear it out and play referring to that content.

Kids learn what they watch--whether it is prosocial or antisocial.

DISCUSSION

Part 2

What can Parents Do? Three Objectives

WHAT CAN BE DONE? WHAT IF YOU DO MONITOR YOUR CHILD'S TV WATCHING.

1. Reduce amount of time spent watching--even if you have PBS on all the time--it's not okay--children need time to exercise and to use their own imagination in play--they also need time to interact with others.

2. Be selective about what they see--there are good shows--and there are better shows and there are terrible shows--parents need to pay attention--monitor what is seen.

3. Interact with child while they are watching--this one step has been shown to be highly effective in mediating how TV affects children. Adult presence and interaction can make a tremendous difference.

Research shows that fathers tend to covie with their children more than mothers.

Don't give parent the message that restrictive, authoritarian rules about viewing are called for. This style is not related to positive effects--rather, parent needs to watch, interact, and discuss with child what is being seen. One very important role for parent is to explain to children what commercials are for and how they work. Young children do not realize that they are being manipulated by parents. Can begin to make this clear.

Three Ways Parents Can Monitor

Research has revealed three styles of parental mediation rules and regulations about viewing.

Evaluative Mediation--which involves explaining meanings of commercials.

Pointing out differences between reality and fantasy and other interactions about content of programs.

Parents' comments about what they are watching have a big impact on children. Example, if the parent says silly--the child will pick up on parent's opinion. This is the most common type of mediation.

Think about which of the above do you do more.

DISCUSSION

Part 3

What Can Policymakers and Child Advocates Do?

The LAW--A little history:

Since the beginning of television, even back to the beginning of movies, adults have been concerned about the effects of these media on children.

In the late 60s under the auspices of NIMH, 40 studies were funded, and in the early 70s these studies were published as the Surgeon General's report--included some 40 studies. Even though the networks had the opportunity to remove the researcher they did not want from this project--the evidence seemed to indicate that violence on TV affects some kids some of the time.

There have been several advocacy groups and task forces established to lobby for laws to monitor and protect children on the effects of programming.

In 1970, the newly formed advocacy group Action for Children's TV ACT, submitted a petition to FCC proposing rules to provide minimum amounts of age-specific programming for children.

Children's Task Force was set up by the FCC in 1974--Concluded with a Policy Statement that would ask commercial licensees to make meaningful effort to increase and air amount of programming for children.

- To limit advertising in children's blocks
- To separate advertising and programming
- To eliminate host tie-in programming

FCC appealed this to the US Court of Appeals who held that FCC could adopt a policy guideline rather than a regulation based on the Task Force's request.

1978--Children's Task Force reconvened by the FCC to see if industry self-regulation was working; investigation followed.

1979--Report presented--Programming guidelines that had been/had not been followed. The 7.2% increasing children's programming attributable to increase of independent stations using syndicated shows.

But the advertising guidelines were being followed.

The reason why the networks were not increasing children's programming?--Advertisers did not find the children's market lucrative enough.

1980--FCC published a Notice of PROPOSED Rule making outlining options ranging from regulating the amount of children's TV to rescinding the Policy Statement.

1983--FCC reopened the Children's TV proceedings to resolve the questions. They concluded that rules were not necessary because children and the youth audience was well served by TV--new cable services and their offerings were cited as proof.

But as one researcher pointed out--to say that children are served better because of cable is like saying that the children of Orlando have their recreational needs served by the presence of Disney World--only those children whose families can afford the admission price get the benefit--same with cable and it's at least \$250 a year cost for basic service.

1984--the broadcast industry was deregulated--Stations were no longer required to provide programming in the public interest. The rationale was that the marketplace would prevail and that needs for public would be met.

By late 1980s Congress was proposing new bills to regulate children's television--particularly advertising--it seems that the marketplace failed to safeguard children from the excesses of advertising in children's programming blocks.

After many attempts and false starts, finally in 1990 Children's TV Act was passed--the first TV regulation in a long time. This bill limits the number of advertising minutes allowed in an hour of children's programming to 10.5 minutes on weekends and 12 minutes during the week.

The bill allows for a review of stations' efforts to provide instructional and educational programming at the time of their licensing renewal.

OPTIONS FOR THE FUTURE

With fiber optics bringing programming into the home, Passwords, to allow parents to block out time periods when certain stations can or cannot be watched, will be possible.

Whether we are dealing with AT and T or cable industry, we will have the technological options to have more control. Of course, we have to stay alert to these options and make consumer-based demands for these services. But none of this helps the poor who cannot afford cable services and must rely only on over-the-air programming.

MESSAGES TO PARENTS

Don't let your kids be exposed to wall-to-wall TV. It will curb their ability to play imaginatively and interact and to exercise. Plus it will expose them to a lot of violent behaviors that will most likely affect them. If not their behaviors, their perceptions of what the world is like and what is an acceptable amount of violence in our lives.

APPENDIX C
PARENT-CHILD QUESTIONNAIRE

Part 1--Visiting Relative

Imagine that you are going on a visit to relatives with your child.
Which one of each of the pairs of things below are you more likely to do?

#'s checked.

- | | |
|---|--|
| 1. <input type="checkbox"/> Tell your child to stop running around and to make less noise. | <u>OR</u> <input type="checkbox"/> Concentrate on having a good time and keeping everybody happy. |
| 2. <input type="checkbox"/> Choose your child's clothing for the visit. | <u>OR</u> <input type="checkbox"/> Let your child decide what he or she is going to wear for the visit, within reason. |
| 3. <input type="checkbox"/> As soon as you have arranged the trip, tell your child so that he or she can start planning for it. | <u>OR</u> <input type="checkbox"/> Point out some feature of your relative's house when you arrive. |
| 4. <input type="checkbox"/> Say "You should always have respect for your elders." | <u>OR</u> <input type="checkbox"/> Explain to your child how he or she is related to the people that you are going to visit. |
| 5. <input type="checkbox"/> After you leave your relatives' home, comment on the way that your child behaved. | <u>OR</u> <input type="checkbox"/> Tell your child that you would like him or her to be like the relatives one day. |

NOW GO BACK AND CIRCLE: Out of the 10 items, the three things that you are most likely to do in this situation.

Circled _____

Part 2--Watching TV Violence

Imagine that you are watching a television program with your child which has turned out to be very violent.

Which one of each of the following pairs of things are you more likely to do?

#'s checked

- | | |
|---|--|
| 1. <input type="checkbox"/> Tell your child that violence is bad. | <u>OR</u> <input type="checkbox"/> Make a joke about the program. |
| 2. <input type="checkbox"/> Point out the bad guys in the program. | <u>OR</u> <input type="checkbox"/> After the show, talk about it with your child. |
| 3. <input type="checkbox"/> Explain to your child that these are just actors and the guns are not real. | <u>OR</u> <input type="checkbox"/> Before it begins, tell your child that you are going to watch this program. |
| 4. <input type="checkbox"/> Tell your child that he or she should not watch this program. | <u>OR</u> <input type="checkbox"/> Let your child decide whether he or she wants to carry on watching. |
| 5. <input type="checkbox"/> Tell your child that people should not behave that way. | <u>OR</u> <input type="checkbox"/> Turn off the TV set. |

NOW GO BACK AND CIRCLE: Out of the 10 items, the three things that you are most likely to do in this situation.

Circled _____

APPENDIX D
PARENT DISCIPLINE ORIENTATION

Once in a while kids talk back to their mothers/fathers/grandparents. When this happens, mothers/fathers/grandparents will usually say or do something about it. Different mothers/fathers/grandparents say or do different things. If your child talks back to you, what do you do? Please read each question carefully and write down the number next to the word which best describes how often you do each of these things. For example, if you never do what it says in question number one, you will write "1" for never next to it.

1 = Never 2 = Rarely 3 = Sometimes 4 = Usually

1. Look sad and you never expected to hear that kind of talk from them ____
2. Say you don't like children who don't show respect for their parents ____
3. Say you'll spank him/her if you ever hear talk like that again ____
4. Spank him or her ____
5. Don't say much, but he/she can tell your feelings are hurt ____
6. Say you won't talk to him/her or have anything to do with him/her unless they say they're sorry ____
7. Make him/her stay home or take away a treat or privilege ____
8. Say you're hurt or disappointed by what he/she said ____
9. Look angry and walk away without saying a word ____
10. Say you'll tell her/his father ____
11. Give an angry look and ignore her/him for a while ____
12. (After she/he says they're sorry) Say it's all right. You know she/he didn't mean what they said ____
13. Which of all of the above do you do most often? ____ (write number)
14. Which of all of the above do you do the next most often? ____ (write number)

APPENDIX E
CHILD MEASURE

Children's Questions POST

Code #: _____ POST TEST
Interviewer: _____
Date: _____

REINTRODUCE YOURSELF and SAY: "Today I want to ask you some questions about TV again."

Understanding What a Commercial Is &
Deceptive Potential

1. *Sometimes on TV you see a new toy or cereal or candy. Why do they show you those things on TV? Verbatim* _____

Mention buying = 2; Getting attention/thinking re: product = 1; DK or Other = 0

2. *What is a TV commercial? (Also, try advertisement, or ad) Do you know what it is? Do you know why they have TV commercials? (one score for all three questions)*

Selling/buying something = 3; Something between programs = 2; Any other description, not patently false = 1; DK = 0 or patently false answer

Verbatim _____

3. *Does a TV commercial show you something that someone could buy?*

No = 0 DK = 1 Maybe = 2 Yes = 3

4. *If you saw a toy advertised on TV that you liked and you didn't have that toy, what would you do? (If answer is "No" for section a or b, ask WHY? Give 2 points for "No" if reason relates to parental rules or other sensitive reason. Give 0 for lack of understanding.)*

Verbatim _____

- a) *Would you ask your Mommy to buy it?*

No = ____ Yes = 3 Maybe = 1 DK or Ambiguous = 0

- b) *Would you keep begging Mommy or Daddy to buy it?*

Maybe = 1 No = ____ DK or Ambiguous = 0 Yes = 3

Verbatim _____

NEXT, SAY: *Now we are going to look at something on TV.*

SHOW TWIX COMMERCIAL

ASK: *What was that about?* Verbatim _____

ESTABLISH THAT IT WAS ABOUT CANDY. SHOW THE REAL CANDY.

5. *Does the candy look better on TV or in real life?*

TV = 2 Real life = 1 DK or NO OPINION = 0

6. IF TV ASK: *How do they make candy look better on TV than in real life?*

Any mention of TV SFX & or deceptive element = 2; any mention of product manipulation other than specific TV SFX or deception = 1; DK and nonsensical answers = 0

Verbatim _____

7. *(Child's name) did you know that the people who make the candy and toys and cereal that you see on TV get money from grownups when grownups buy these things at the store? And did you know that sometimes when they show you the candy or cereal or toy on TV they try to make the candy or cereal or toy look better in the TV commercial than it really is in real life? Why do you think they sometimes try to make the candy or toys look better on TV than in real life?*

Verbatim _____

8. *Are commercials trying to get you to buy something?*

Maybe = 2 No = 1 DK = 0 Yes =

Verbatim _____

Selling or Persuasive intent = 2; to pay attention/watch on TV/think about it = 1; DK or Nonsense = 0

9. *One child told me that the reason they sometimes try to make candy or cereal or toys look better on TV than in real life is because: They don't know how to make it look the same on TV as in real life. Do you think that is right or wrong?*

Wrong = 1 Right = 0

10. *Another child told me that the reason they sometimes try to make candy or cereal or toys look better on TV than in real life is so kids will ask their parents to buy them. Do you think that's wrong or right?*

Right = 1 Wrong = 0

11. *And another child told me that they sometimes try to make candy or toys look better on TV than in real life so that the kids on TV will have more fun. Do you think that is right or wrong?*

Wrong = 1 Right = 0

12. *Is a commercial part of a TV program?*

DK = 1 Yes = 3 Maybe = 2 No = 0

13. *Do you think the people who make the toy want it to look better on TV than in real life on purpose or do they make the toy look better on TV by accident?*

It is an accident = 1; It is not an accident--they do it on purpose = 3;
DK = 0; Maybe it is an accident/or Maybe it is on purpose = 2

Discriminating between Commercials and Programming

Now we are going to watch some things on TV. I want you to tell me whether we are watching a program (or show) or a commercial. Remember, a commercial is when they are showing you something on TV that people can buy.

Show child videotaped segments from programs and commercials. Ask child to tell you if the segment is a program or commercial (about something you can buy). Once they have identified whether it is a program or commercial, ask them to tell you what it is about. Circle P = program; C = commercial.

- 15—Segment 1. P/C_(19a) _____
16—Segment 2. P/C_(20a) _____
17—Segment 3. P/C_(21a) _____
18—Segment 4. P/C_(22a) _____
19—Segment 5. P/C_(23a) _____
20—Segment 6. P/C_(24a) _____

Now I want you to pay attention because I am going to show you one commercial and then I am going to ask you questions about it.

SHOW THE CROCODILE DENTIST COMMERCIAL.

ASK: *What was that about?* Verbatim _____

Names specific product = 3; Specific, applicable details = 2;
General but applicable = 1; Not applicable/DK = 0

21. *Now I am going to show you some pictures.*

TAKE OUT PICTURES, ALLOW CHILD TO PLACE ON TABLE.

ASK: *Can you tell me what is going on in these pictures? (Allow child to guide sequence of discussion. Go over pictures with child to make sure they know what each one represents. (Pictures include child: watching TV, child sitting with thought bubble in, child in store with parent selecting toy, child playing with back to the TV.)*

ASK: *Can you show me: Which picture shows why the people who make the toy want you to see the toy on TV?*

Shopping = 4; To have fun watching = 3; Thinking about toy = 2;
Taking a rest = 1

AFTER CHILD CHOOSES ONE PICTURE, COVER IT UP and ASK: *What's the next best reason why the people who make the toys want you to see the commercial. ETC.*

2 _____
3 _____
4 _____

Family TV Talk Picture Questions

SAY: *Now I'm going to show you a picture. Please pretend that the people in the picture are you and your family. I'll ask you some questions about the picture.*

SHOW PICTURE OF FAMILY WATCHING TV. HELP CHILD IDENTIFY OR PRETEND THAT PEOPLE IN PICTURE ARE MEMBERS OF THEIR FAMILY.

What are they talking about? _____

What is (the woman) saying? _____

What is (the man) saying? _____

What is/are (you) saying? _____

What is the other child saying? _____

INTERVIEWER COMMENT (mention any unusual circumstances or other important observation):

APPENDIX F
APPEARANCE-REALITY PRETEST ONLY MEASURE:
HOW IT WAS ADMINISTERED

A hand puppet covered in a white cloth was shown to the child by the interviewer. The interviewer then said

Here is a puppet of a (boy or girl). The puppet looks like a ghost puppet to your eyes right now, but it is really and truly a (boy or girl) puppet.

At this point, the interviewer raised the white sheet covering the hand puppet and revealed to the child that the puppet beneath was a boy or girl puppet. the interviewer then said

Sometimes things look like one thing to your eyes when they are really and truly something else.

The child was then asked the color of a small white candle. After giving their response, they were then shown the same candle with a green filter held in front of it and asked

Is the candle really and truly green? or Is the candle really and truly white? (Interviewers counterbalanced the order of the choices.)

A second appearance-reality task was then introduced. The interviewer showed the child the candle again and said

This is a birthday candle. Now tell me, is this a giant birthday candle or a regular-sized birthday candle. (Again, the choices were counterbalanced from subject to subject.)

Next, the interviewer showed the child a picture of a boy with a cake with a large candle in it. The interviewer then said

Here is a picture of a boy with a birthday cake. This is a picture of the very same candle. Is this candle really and truly a giant-sized or a regular-sized candle? (Again, the choices were counterbalanced from subject to subject.)

Children were tested for appearance-reality distinction ability on the pretest only.

APPENDIX G
VISUAL CHOICES



Figure G-1. "Thinking about the Toy." One of four possible responses to child measure question "Can you Show me: Which picture shows why the people who make the toy want you to see the toy on TV?"



Figure G-2. "Shopping for the Toy." One of four possible responses to child measure question "Can you show me; Which picture shows why the people who make the toy want you to see the toy on TV?"



Figure C-3. "Taking a Rest." One of four possible responses to child measure question "Can you show me: Which picture shows why the people who make the toy want you to see the toy on TV?"



Figure G-4. "To Have Fun Watching." One of four possible responses to child measure question "Can you show me: Which picture shows why the people who make the toy want you to see the toy on TV?"

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BIOGRAPHICAL SKETCH

Metaphorically speaking, it seems apt that Denise Matthews was born on a Halloween eve in Hartford, Connecticut, not long before television's incorporeal images came to possess American culture. Like most children in this first TV generation, her preschool passions were "Ding Dong School" and "Howdy Doody." Despite these mainstream beginnings, by the age of nine she was watching the young Allistair Cook hosting "Omnibus" on Sunday afternoons--a sure sign to any keen observer that she had a predilection for intellectualism, a quality long considered antithetical to television viewing. The blame lay squarely on her family who enjoyed excerpts from Shakespeare, the opera, and ballet featured on the program. Thus, due to this eccentric parental mediation she came to associate television with learning and culture--a socializing experience which left its life-long mark.

Ms. Matthews earned a BS in film and television production from Boston University's School of Public Communication. Given her Omnibusian background, she predictably sought employment in Public Television and during her career has worked either on staff or on contract with eight PBS affiliates from Boston to Orlando.

Although television writing and production were her prime interests, she remained fascinated by the human potential to learn from television.

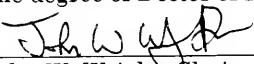
This fascination with learning lead her to earn a master's degree in education, emphasizing television learning, from the University of Connecticut. Combining her interests in production and educational psychology, she worked for a National Institutes of Health research and demonstration center at the University of Vermont, where she produced public and professional educational media products. She persevered until one day when a VCR froze in the field and frostbite made it impossible for her to move pen on paper--at which point she made the logical move and headed for Florida.

At the University of Florida she found a community of similarly dedicated telecommunication professionals engrossed in academic communications research. Surrounded by many worthy role-models, she continued to produce video products and eventually taught writing for the electronic media as adjunct faculty in the University of Florida's Department of Telecommunications. She received a regional Emmy for the historical documentary, "Black Warriors of the Seminole" in 1990. In the fall of 1991 she began full-time pursuit of a Ph.D. in mass communications at the University of Florida. In this program she continued to share her passion for the medium by teaching writing and production to telecommunication undergraduates.

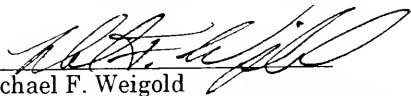
On the eve of yet another Halloween and the attainment of that Ph.D., she prepares to continue creating entertaining, educational video products for the Institute for Child Health Policy, a national center located at the University of Florida and dedicated to dissemination of information about

children's health issues throughout the country. She anticipates producing "new technologies" like distance learning and interactive video and conducting research related to this dissertation as well as to the growing use of media technology for professional education and training.

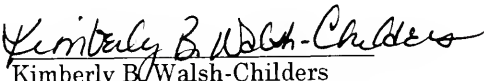
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John W. Wright, Chair
Professor of Journalism and
Communications

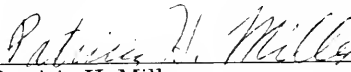
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Michael F. Weigold
Associate Professor of Journalism and
Communications

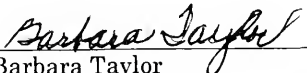
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

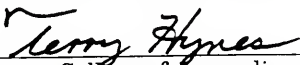

Patricia H. Miller
Professor of Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


Barbara Taylor
Professor of Agricultural Education
and Communication

This dissertation was submitted to the Graduate Faculty of the College of Journalism and Communications and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December 1994



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